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Original Communications.

Art. I.—*False Aneurism from Ulceration of the Femoral Artery in the Groin—Primitive Iliac tied by Penetrating the Peritoneal Cavity.* By Middleton Goldsmith, M.D., Professor of Surgery in the Kentucky School of Medicine.

A French Canadian, named Peter——, aged about forty years, a common laborer, residing in the village of Whitehall, N. Y., met with an accident by which his left femur was dislocated so that the head of the bone was thrust under Poupart's ligament, and overrode the margin of the pelvis in such a manner as to underlie the femoral artery, and was so firmly locked in this position that the attending physician was unable to reduce it. I saw the man some two months after the accident. I found the limb still unreduced. A large and somewhat diffused swelling occupied the groin, extended to the middle of the thigh, and filled the iliac fossa. Throughout the whole extent of this swelling a distinct but feeble pulsatory distention could be felt. The whole was somewhat firm, least so in the groin, at which point the head of the bone could be obscurely felt.

I learned from the patient and his attendants that the swelling under observation first made its appearance a a few days after the accident, and had gradually increased from that time to the date of my visit.

The tumor was obviously aneurismal; and, from the date of its first occurrence, the conclusion was inevitable that the blood must have escaped from the femoral artery in consequence of ulceration produced by pressure of the femur. This was the opinion upon which the operative procedures were based.

The man was pale and exsanguine, and, even with the free use of opium, had suffered severe and constant pain. The pain was referred chiefly to the swollen parts, but it extended also somewhat to the lower part of the limb.

It was evident that, since the tumor extended into and occupied the whole of the iliac fossa, a dissection made in the usual way for the ligature of the primitive or the external iliac must traverse the aneurism itself. I feared, too, that an attempt to place a ligature upon the external iliac, in the difficulties and obscurity attending its application from the interior of the abdominal cavity, would hazard the opening of the aneurismal sac—for it must be remembered that the use of a knife in dividing the peritoneum in such a case was not to be thought of. I therefore determined to tie the common iliac in the middle of its course. My residence at that time was in Castleton, Vermont, some fourteen miles distant from Whitehall, and having no instruments with me, I postponed the operation until the following day.

On the morning of the next day I proceeded to the operation. I had for my principal assistant Prof. Laford, of Castleton Medical College; Dr. Monroe, and several of the physicians then resident in the village, were present. The patient was etherized.

An incision was made through the abdominal muscles seriatim. The incision began at the edge of the rectus on the left side, terminating near the crest of the ilium, and was so placed as to traverse obliquely the course of the common iliac. On opening the abdominal cavity, the intestines protruded through the wound. I had provided myself with broad spatulæ in the hope that by their use the intestines could be held aside so as to allow me to see the artery and the crossing of the ureter, but they were of no service. It was impossible, by any means used, to get a glimpse of the parts. I then introduced my fingers and first felt out the ureter. I scratched through the peritoneum with the finger nail. Then, with one finger of the left hand holding aside the ureter, I isolated the artery with the forefinger of the right hand, using the finger nail, and passed an armed aneurism needle around it. Next, having assured myself that the artery, and nothing but the artery, was included in the bite of the ligature, the latter was tied. All pulsation in the tumor ceased. Before the wound in the abdominal wall was closed, I satisfied myself and those around me that the whole iliac fossa was filled with the tumor. The limb was enveloped in flannels.

The patient rallied from the operation well. I left him in charge of his attending physician, with direction to use stimuli if necessary, and to give at once a full dose of opium. Natural warmth returned in the limb within the first twenty-four hours. The case progressed favorably until the fourth day. He had in the meantime been kept under the influence of opium to a degree sufficient to prevent pain. He did not have during the time any abdominal tenderness. On the 30th day the pulse was accelerated to a degree far beyond that observed before the operation—ranging from 120 to 140. On the night of the third day the patient became delirious, and continued so until the 5th day, when, after eating some indigestible food, he had an attack of vomiting, and died.

Post-mortem Appearances—Cadeveric rigidity; body somewhat attenuated; abdomen lax. The abdominal cavity was laid open. The wound had nearly healed; the edges of the cut peritoneum adherent throughout—a small amount of tough adherent and vascular exudation along its track. No redness or injection of the peritoneum could be found in any part of its extent except at the point above named, and about that where the ligature was applied. At the latter point some tough and adherent lymph was found, small in quantity and without evident vascularity. The ligature was seen midway between the origin of the common iliac and its bifurcation. The artery being laid open, two firm coherent coagula were found: that on the cardiac side of the ligature extending to the bifurcation of the aorta, and projecting a little into it; that on the distal side extending into the external and internal iliac a little way beyond the bifurcation. On tracing the external iliac down into the femoral, (which was without coagulum,) a perforation was seen, involving about half an inch of the femoral and about one inch of the external iliac on its postero-external aspect. The external iliac through its whole length was embedded in the aneurismal tumor, which was found to occupy the whole of the iliac fossa, and to project so far inwards from the edge of the pelvis that the artery traversed it about the middle.

The boundaries of the tumor here were those of the iliac fascia, except that the fascia was bulged out as it were, like a bladder, by the impulse of the blood. In the groin the tumor, bounded above by Poupart's ligament, reached laterally from within an inch of the symphysis to a point two inches beyond and outside of the anterior superior spinous process of the ilium, and extended downwards in an angular form about five inches, the apex of the angle being directly under and adherent to the femoral artery.

This irregularly formed tumor was covered by the iliac fascia and the fascia femoris, except at a point just below Poupart's ligament, where the blood had pushed up through the saphenal opening and formed an irregular cavity, about the size of a goose egg, in the superficial cellular and fatty tissue. The cavity of the aneurism was occupied by large coagula, some parts of which were firm and something dried, while other portions were broken down into a thin greyish-black, stinking, diffluent matter. The head of the femur was found in the cavity of the tumor, bathed by this diffluent matter, resting with its neck on the brim of the pelvis, partly under but with its major part posterior and external to the artery. The apex of the trochanter major occupied the cavity of the acetabulum. The surface of this portion of the trochanter was stripped of its periosteum and softened in texture. The articular cartilage of the acetabulum had also disappeared, leaving the bone underneath rough and somewhat softened. On the outer edge of the trochanter was an osseous growth resembling a patella in shape, but about one third larger in size. This mass was attached to the trochanter at a point just below that which was covered by the projecting edge of the acetabulum. In relation with the acetabulum and with the trochanter it formed a sort of crutch in which rested that portion of the acetabulum formed by the ischium. The effect of this arrangement was to strengthen the joint at its weakest point, and to prevent further dislocation in the only direction in which it could take place—namely, inwards and upwards.

Remarks.—It seems to me, from the consideration of all the facts in the above case, that the death was hastened—not caused—by the slight disturbance produced by the eating of indigestible food. The patient for two days before death had been delirious, and had increased frequency of the pulse. One cannot but be struck with the similarity of the constitutional state to that which has so often been observed by the older surgeons as attending the fatal result, especially in large false aneurisms of the thigh.

The only thing in the post mortem appearances at all accordant with the symptoms during life, or sufficient to account for them, was the softened, decomposed, and fœtid blood clots. There was no hemorrhage, there was no peritonitis, there was no increase of pain or tenderness of the tumor. The symptoms were just those which we see in gangrene, and I have but little doubt that the death was caused by the same agencies that are in operation in mortification pure and simple—that without inflammation. A case of this kind is related by Sir Everard Home. The patient was an inmate of St. Thomas' Hospital, and was operated upon by Mr. Birch for aneurism caused by a blow received two months previously. The tumor was found, on examination, "extending within two inches of Poupart's ligament upwards, and occupying two-thirds of the thigh." The operation was made on Friday, Nov. 3d, 1786. On the 9th of November the tumor began to grow thinner at one point. The patient was feverish in the evening. On the 11th he was purged and grew better. On the 12th tumor was very thin in one part. The limb was warm and movable, but the patient was feverish and delirious at night. 13th. The patient delirious. 14th, he became sensible, but was languid and hot. This day the tumor burst and discharged serum and grumous blood, which was followed by fainting. The dressings were not disturbed, and the patient slept composedly. He fainted again at about six in the evening, and died. On dissection, "the integuments in the middle of the tumor were mortified. The blood contained in the tumor was very putrid, and the greater part of it fluid; it appeared to be dissolved by putrefaction." (*Observations on Aneurism*, Syd. Soc. p. 379, 380.)

DESCHAMPS, (*op. cit.*, p. 430,) operated upon a woman on the 19th of June, 1793. The tumor diminished a little, the leg preserved its natural warmth and sensibility, but there was a painful swelling of the thigh, and the patient died in a few days with delirium. The aneurism was nearly as large as a fœtal head. The whole of the cellular tissue was infiltrated with pus.

MR. PORTER, (*op. cit.*, p. 392,) reports a case, occurring in the Meath Hospital in 1833, of a femoral aneurism in which death was preceded by vomiting, rapid pulse, great anxiety, etc. Here, although there had been some hemorrhage from the tumor, it is evident that the fatal termination was rather attributable to gangrene of the contents of the sac, propagated thence to the superficial tissues overlying the tumor.

In the *Revue Medicale* for September, 1832, is related a case of gluteal aneurism twenty inches in circumference, in which the patient died. The symptoms preceding dissolution are not stated, but the only material post-mortem appearance noted is that the aneurism contained a large amount of broken down blood. There had been no hemorrhage.

MR. TODD, (*Med.-Chir. Review*, June 1823,) relates the case of a female in whom the iliac was tied for the relief of a large aneurism of the groin. The artery was tied on the 2d day of June. The aneurism had been opened previous to the operation. On the 8th of June "the discharge is profuse, coagula come away freely, some resembling putrid blood," etc. She died on the 17th.

I need not transcribe the particulars of several other cases in which death followed the application of the ligature, and was not attributable to hemorrhage or to mortification of the limb, etc., but in which, as in my own case, the prominent pathological change was the decomposition of the blood clots in the aneurismal cavity. It is noticeable, however, that in every one of the cases the aneurism was either originally false, or had become so substantially by rupture or puncture of the aneurism.

ERICHSEN, (*Syst. Sur.* p. 485,) in speaking of suppuration of the sac, says: "The contents of the tumor, softened and broken down by inflammatory action and the admixture of pus, are discharged through the aperture in its wall in the form of a dark, purplish-brown or plum colored, and often fetid fluid, intermixed with masses of soft, dark coagula of the drier laminated fibrine, which may not inaptly be compared in appearance to portions of raisins or dates." In this he recognises the frequency of the decomposition of the blood clots, but seems to regard the result as attributable rather to the agency of inflammation occuring in the walls of the sac; whereas it appears to me that the inflammation which occurs sometimes—not always—is rather to be ascribed to the changes which take place in the clot. He says upon the same page: "This accident is also greatly predisposed to by the blood contained within the aneurismal tumor undergoing simple coagulation instead of fibrinous consolidation. The mass of the coagulum, instead of being absorbed, and thus gradually disposed of, as happens in a properly stratified aneurismal sac, is very apt to break up, and undergo decomposition, and being converted into an unhealthy grumous fluid that excites inflammation in the parts with which it is in contact. This state of things is especially liable to happen in those aneurisms that are of very large size, with thin parietes, and that contain previous to the operation much fluid blood and comparatively little amellated fibrine." In these passages Mr. Erichsen, while he recognises the dissolution of the blood clot as the primary step in suppuration of the sac, overlooks the possibility that the decomposing blood clots, may, by their absorption, produce constitutional contamination and death, without the supervention or intermediation of inflammation and its consequences.

I think enough has been said to show that, in the case which I have related, death was caused by the constitutional contamination produced in consequence of the absorption of decomposed blood clots. I must say that I have been struck by the very great mortality which has attended the operation for the cure of large false anurism by the so-called Hunterian operation, and the comparative small number of deaths by the old method of ligature above and below the tumor with evulsion of the blood clots—so much so, indeed, that I propose on a future occasion to enter into an analysis of the cases recorded, to see if we may not in certain cases do better by reviving the old method of operating. At present I cannot resist the impression that, in the case I have related, my patient would have had a better chance of recovery if I had laid open the anuerismal cavity, tied the artery above and below the tumor, and removed the contents of the latter.

ART. II.—*Induction of Premature Labor and Abortion as Obstetric Resources.* By HENRY MILLER, late Professor of Obstetrics in the Medical Department of the University of Louisville.

[At a recent meeting of the College of Physicians and Surgeons of this city, PROF. HENRY MILLER related *one* case in which he induced premature labor successfully both as to the mother and child, and *two* cases in which abortion was produced for the safety of the mother. At our solicitation he has kindly furnished us the following abstract of these interesting cases.]

CASE I, *In which premature labor was induced at seven and a hatf months of the fourth gestation of a lady, whose first three children were lost at the full term on account of the necessity of resorting to the perforator and crotchet.*

Mrs. B. came to the city from a distant county in this State, in April 1858, to seek my professional advice. She was, by her own estimate, about five months advanced in her fourth pregnancy, and was naturally anxious about its result, having lost three large and well developed children, the product of her previous pregnancies. She stated that the physicians who had attended her on these occasions, were of the opinion that it would not be possible for her to give birth to a living child at the full time, owing to the small size of her pelvis.

Mrs. B. is a dumpy woman and fat withal, not quite thirty years old, but hearty and robust. On making a tactile examination per vaginam my attention was at once arrested by the manifest morbid inclination of the plane of the superior strait of the pelvis, giving an unusually low position to the external genitals. It was not without difficulty that the os uteri could be touched by the finger, nor could I satisfy myself whether the uterus was really increased in size; at any rate I was by no means sure that its size was commensurate with the reputed period of pregnancy. The hypogastrium was next examined by palpation, but in vain, for the thickness of the adipose tissue in this region was so great that neither the uterus nor any other organ could be felt though it. The speculum uteri was then employed, but without shedding any light on the subject, as the os uteri did not present the indented outline, described by Mr. Whitehead, which I have seen in a few cases of early pregnancy, and which may sometimes be regarded as distinctive of that condition. She had few or none of the symptoms which ordinarily attend pregnancy—no nausea or vomiting, or alteration of appetite, only the menses had been suppressed for four or five months, but they had been irregular previously. On the whole, I was more in the dark than was agreeable, not only as to the period of pregnancy but whether she was really pregnant at all. I advised her, therefore, to return home and come back again in two months.

Mrs. B. returned to the city about the first of June, and I was gratified to find that there was no longer any grounds for doubt or uncertainty as to her condition. She was about seven months advanced in pregnancy. The motions of the fetus could be felt, the pulsations of its heart could be heard, and the enlarged inferior segment of the uterus could be reached by the vaginal touch, whilst, on account of the distention of the walls of the abdomen and the absorption of some of the adipose layer covering them, the fundus uteri could be pretty distinctly traced.

It was settled at Mrs. B's first visit that, with a view to her own safety as well as that of the child, premature labor should be induced, when the child had attained its viability. Judging that she had now reached the seventh month of pregnancy, I determined to wait a fortnight longer before resorting to means to bring on labor. In this case I concluded to adopt the method of inducing premature labor, recommended by the late Prof. Kiwisch, of Germany, and so strongly urged by him in preference to all other methods, viz: the *uterine douche*, or pouring a continuous stream of water upon the os uteri with a fall sufficient to impart to the stream a considerable momentum. For this purpose an apparatus was constructed according to the directions of the German professor with only a slight and unimportant variation, consisting of a tin box ten inches square, holding about four gallons, with an India rubber tube, twelve feet long, attached to the bottom of the tin box by a screw and nut, and having a metallic tube, six inches long, affixed to its other extremity—the end of the metallic tube being fashioned like the nozzle of the common enema syringe. Instead of arranging the apparatus to act on the principle of the syphon, as recommended by Kiwisch, a stop-cock was adapted to the India rubber tubing about two feet from its metallic end. To put the apparatus in operation, the box must be suspended on a nail driven into the wall near the ceiling of the room, say nine or ten feet above the floor; the India rubber tubing must be screwed on, and the stop-cock turned so as to prevent the flow of the water till it is wanted. The patient takes her seat on a stool placed in a bath tub to receive the water, the metallic nozzle is introduced into the vagina and in contact with the os uteri, and the tin box having been previously filled with water, the stop-cock is turned so as to pour a continuous stream upon the os uteri until all the water in the box is discharged. KIWISCH prefered to use warm water in douching, directing it at first of a temperature upwards of 100° Fahrenheit, and afterwards raising the temperature considerably higher.

On the 16th of June, the warm water douche was commenced in Mrs. B's case, in the afternoon, only one douche being administered that day. On the 17th, two douches were given, one in the morning and another in the evening. On the 18th, two douches. On the 19th, two, when a marked change was observed in the state of the uterus—its fundus was lower in the abdomen, and the os softened and dilated, though there had been as yet no labor pains, the patient complaining only of some aching across the hips. Painless contractions of the uterus had, however, been excited, not only had the uterus descended and its mouth dilated, but the head of the child could be distinctly felt by the finger. Inasmuch, however, as progress appeared to be rather tardy, I determined, on the 20th, to adopt partially the suggestion of DR. TYLER SMITH, viz: to use warm and cold water alternately; I say *partially*, because unless two boxes had been provided, the one to contain warm and the other cold water, or unless a syringe had been substituted for the apparatus of KIWISCH, I could only discharge a box of warm water and then a box of cold water. This was done twice on the 20th and twice on the 21st. After the morning hot and cold douche of the 21st, labor set in, but the pains being feeble in the evening, the douche was repeated, as already stated, with the effect of increasing the pains to such a degree that I was called to her assistance in the early part of the night, and early the following morning she brought forth a living child—a daughter—after a labor of average intensity and duration, and without any aid except such as needs to be rendered in every case of natural labor.

Mrs. B. had a rapid convalescence, uninterrupted by accident of any kind. She maintained a good appetite, ate what pleased her, laughing at all dietetic rules, and twelve days after her confinement, despite my remonstrances, she started home, where she safely arrived with as little delay as though nothing had happened to her. Within the last two or three months I have heard from Mrs. B. She continues to enjoy her usual good health, and is not ashamed to exhibit her child among such as have had the advantage of a longer uterine gestation.

CASE II. *Abortion induced at the fourth month of pregnancy on account of contraction of the pelvis to such a degree as to make it doubtful whether delivery could be safely accomplished after the fetus should be viable.*

Mrs. D., pregnant for the second time, and about three months advanced, came to the city from a remote county of this State, by the advice of the physician who attended her in her first confinement, and who was persuaded that she could not possibly be delivered of a living child at the completion of the pregnancy, and probably not even at the seventh and a half month. This opinion was founded on the extreme difficulty of her first labor, which lasted eighty-five hours and was terminated by the crotchet—it being not possible to deliver with the forceps, so closely was the head of the child impacted in the pelvis. Mrs. D. is a healthy looking young woman, with good complexion and no marks of a strumous diathesis, and yet I found, on examination, the most contracted pelvis which I have ever met with in the living subject. All its dimensions appeared to be much under the average measurements, and it was easy to touch the promontory of the sacrum with the index finger—so easy that the antero-posterior diameter of the superior strait did not, as well as

I could judge, much exceed two inches. The outlet of the pelvis is also notably contracted. She was, at the time, about three months gone in pregnancy.

I concurred, therefore, with her medical adviser at home in the discouraging prognosis which he had made, as to the consequences of another delivery at the completion of pregnancy; but, as I thought that she might perhaps give birth to a child at the seventh month, non-interference until that period was suggested. She was, however, utterly averse to the experiment, more especially as I could not speak very confidently of the probability of its success, either as to herself or the child. The suggestion being rejected, I sanctioned a resort to the alternative of abortion, artificially induced, and she returned home to place herself under the care of her family physician, an accomplished and skillful practitioner. In my letter to him I advised *the warm and cold douches*, administered as in Case I, as the means of exciting abortion; but though they were kept up for a month, they signally failed: not the slightest uterine contractions were awakened by them. She had now reached the fourth month of pregnancy, and by my advice *the uterine sound* was resorted to to provoke expulsive contraction. Her medical attendant found it very difficult to introduce the instrument, as it was not easy to reach the os uteri, but succeeding at length, he determined to allow it to remain in the uterus, until pains should be excited, which occurred in twelve hours after the introduction of the sound, and seven hours subsequently the ovum was expelled. I have since learned that Mrs. D., though debilitated by what she had undergone, has entirely recovered.

CASE III. *Abortion induced at the fourth month of pregnancy in a lady suffering from separation of the bones of the pelvis at the pubic and right sacro-iliac symphyses, the consequence of previous pregnancies and deliveries.*

Mrs. J. came from a neighboring county in this State to consult me in respect to her condition. She is a delicate woman, without much stamina of constitution originally, and her strength has been much undermined by long suffering and confinement to bed. She is thirty years old, and the mother of seven children, all large at their birth, the least weighing nine and half pounds, the rest ten to eleven pounds. In the latter part of her fourth pregnancy separation of the symphysis pubis took place, disabling her from walking or even standing on her feet, so that she kept her bed until after her delivery. Nor did she recover the ability to stand until four months had elapsed, when, by being supported, she could manage to move a little about the room, by sliding one foot before the other. During all this time her sufferings were great, upon the least motion, even being turned in bed, the pain complained of being in the affected joint. Nevertheless, she became pregnant again, for the fifth time, with the effect of aggravating her sufferings and incapacitating her yet more for standing or motion of any kind, either during or subsequent to parturition. After the usual intervals, a sixth and seventh pregnancy ensued, but after the last it was discovered that the right sacro-iliac symphysis had given way, since which time she has been bedridden. To add to her misfortunes she had three attacks of phlegmasia dolens, viz: after her fourth, fifth, and sixth confinements. Her last accouchement occurred in March, 1859, and she became pregnant again in July following. Being persuaded in her own mind that she could not go through with another gestation and its sequelæ, she consulted me, 20th October, in regard to the expediency of inducing abortion, and after mature deliberation I gave an opinion favorable to that resort, rather than allow the pregnancy to run its course and destroy perhaps what little hope remained that the two pelvic articulations, already loosened, might recover their solidity and enable her to discharge her duties towards the numerous family, mostly girls, which her pertinacious fecundity had already thrown upon her hands. The case, considered in reference to artificial abortion, is, as I was aware, a novel one—none such being found on record, so far as I know; but the lack of precedent ought not to deter us from pursuing the dictates of our private judgment; for after all, every case must stand on its own bottom, and our conduct must be regulated by the indications it affords.

Having decided to induce abortion in this truly pitiable case, I selected the uterine sound as the means of effecting it, and on the 20th October the instrument was easily introduced and passed in to the depth of upwards of three inches, between the membranes and the anterior wall of the uterus. The point of the sound was turned first towards one side of the uterus and then towards the other side, drawing the instrument down towards the os uteri after each revolution of it, with a view of breaking up the adhesions of the membranes as extensively as possible. No hemorrhage followed the operation, and Mrs. J. was immediately removed to the cars to be taken home, according to previous arrangement. Some pain followed the operation, and continued for a day or two; but the uterus was not moved to expulsive contractions.

November 8th.—The patient was brought back to the city, with the uterus quiescent and well disposed to contain and guard its deposit. The sound having failed, I now concluded to try Cohen's method of exciting labor, viz: *injecting warm water between the membranes and inner surface of the uterus.* A silver tube, like the male catheter but with a less curvature, was introduced as before, and two and a quarter ounces of warm water thrown in with a syringe. This was done at noon, and an hour afterwards she had a chill, followed by smart fever with head-ache, which passed off in three or four hours, leaving dull pain in the hypogastrium and back. In the early part of the night, well-marked labor pains set in, but they were few and feeble until towards morning, when they became stronger and more frequent, accompanied also with some hemorrhage. At 6 o'clock in the morning the os uteri was dilated to the size of a quarter of a dollar, with a membranous pouch protruding, which soon ruptured, despite my endeavors to prevent it; at 10½ o'clock, the fetus was expelled, the little umbilical cord remaining entire and preserving its connection with the placenta. By gentle and cautious assistance with the fingers during the pains, I succeeded in getting away the secundines without lacerating the attachment of the cord, and the fetus, with the cord and membranes attached, are preserved in the museum of the College of Physicians and Surgeons.

Mrs. J. was taken to the cars in less than a week, and conveyed home. I provided her with a leathern belt, with instructions to wear it constantly, tightly buckled around the pelvis, in order to counteract, as much as possible, motion at the loosened joints, and at the proper time to have a stream of cold salt water poured from a height on the pelvic and sacro-iliac symphyses. She was also directed to take iron and nutritious diet, and to be often carried out for the benefit of fresh air and exercise. But above all she was charged to keep her generative faculties in abeyance until such time, should it ever come, as may admit of their indulgence without the risk, not to say certainty, of making her a hopeless and useless cripple for life.

ART. III.—*A Contribution to the Urology of some Morbid Conditions.* By W. BRATTLER, of Munich. Translated from the German, for the Louisville Medical Journal, by S. C. BRANDEIS, M. D., of Louisville, Ky.

Under this title, we find in the "*Vierteljahrschrift fur praktische Heilkunde*" for July, a notice of the results obtained by BRATTLER in numerous investigations in typhus, measles, scarlatina, glanders, acute rheumatism, pneumonia, pleurisy, morbus brightii, diseases of the heart, cholera asiatica, pulmonary tuberculosis, syphilis, carcinoma ventriculi, emphysema pulmonum, and cerebral apoplexy.

Brattler directed his attention particularly to the urea, the chlorides, and the phosphoric acid; and employed in his investigations Liebig's tritrition-method, (*tritrirmethoden.*) He examined only acid urine, derived in most cases from male subjects.

In advance of his own investigations he gives the average amount of the excretion in the healthy condition, as deduced from the observations of others. From these the daily amount of urine is estimated at 1563 cub. centimetres, urea at 31.583 grammes, chlorides 13.32 grammes, and phosphoric acid 3.603 grammes. At the same time he calls particular attention to the fact, elicited by others, that the solid constituents of the urine are relatively increased in the physiological condition, if rich nitrogenic nourishment is administered, combined with copious drinks, and physical exercise and exertion. From this he proceeds to consider the diseases mentioned above:

1. *Typhus.* As it is established that the excretion of urea is very considerable in this disease, notwithstanding the system is supplied with very little nourishment, it can only be accomplished by a faster and more rapid consumption of nitrogenous elements belonging to the system, as intimately connected with fever of high degree, at the same time answering for the rapid emaciation. Here it can be observed, that in the same proportion as the temperature is increasing in the first two weeks, the excretion of urea is rising; and so, *vice versa*, with the falling of temperature in the later period the excretion of urea is diminishing. The reduced export of urea during the convalescent state is a result of the rapid transformation of nitrogenic nourishment into organic tissue.

The *chlorides* seem diminished in typhoid urine from the following causes: 1, the small import of nourishment, and the suspended absorbing faculty of the alimentary duct; 2, the diarrhœa; 3, the great exudation in the lungs.

Phosphoric acid in the typhus urine has a direct relation with the urea; and as the former is the most important constituent of muscular tissue, which is the fastest consumed in high febrile reaction, it is clear that this also depends upon transformation. Cases presenting albumen in the urine, permit an unfavorable prognosis. BRATTLER found the urine of typhus always acid, but rarely with a precipitate of urates.

The *urea* and *chlorides* in typhus present some very important points in reference to the *prognosis*, as all those cases in which the amount of urea does not reach an extraordinary degree, and the chlorides are not diminished for a long time, generally terminate favorably. As therapeutical indications drawn from the observation of nine cases, it follows, that the loss of the nitrogenic elements is to be restored, and the fever to be moderated. The administration of good and strong salted beef soups, with the yolk of an egg, black coffee, quinine (12—18 grains in 24 hours,) and, if the temperature rises above 39° C., cold bathing, is advised—a management which has been adopted for a series of years in the ward of Dr. Gietl, in Munich.

2. *Measles* (Morbilli.) There was only one case observed, in which the eruption was very scarce. In the state of eruption the secretion of urine was small, and its solid elements diminished; in that of efflorescence the secretion of urine was copious, the amount of urea increased, the phosphoric acid little diminished, the chlorides missing entirely for three days; in the convalescent stage urea and phosphoric acid diminished, chlorides returning.

3. *Scarlatina*, (one case.) In the state of efflorescence, secretion of urine diminished—augmented at recovery. In the former stage the amount of *urea* considerable; *phosphoric acid* a little increased; *chlorides*, in proportion to

nourishment, copiously excreted. In convalescence, urea and phosphoric acid below the normal amount.

4. *Glanders.* Excretion of urine normal—urea and phosphoric acid increased—chlorides less.

5. *Acute Rheumatism,* (four cases.) Secretion of urine at beginning and at acme of disease diminished, rising with the descent of fever and articular affection. The disposition of urine to deposit urates disappears with the improvement. Specific gravity very high when the secretion is spare, decreasing with the increase of secretion. *Urea* rising at the commencement and acme, falling with the descent of fever. The *chlorides* show the reversed relation; their decrease is to be looked for in the deposition of exudates. Phosphoric acid shows no constant relation.

9. *Pneumonia,* (two cases.) Urea appears considerably in the state of hepatization, but at the appearance of resolution and decrease of fever, vanishes gradually below the normal amount; the chlorides present the reverse. Phosphoric acid similar to the urea: the augmentation of these depends upon the high general reaction, while the defect of chlorides is connected with the great amount of that salt contained in the pneumonic exudate.

7. *Pleurisy,* (two cases.) The quantity of urine, which is spare from the commencement, rises in direct proportion with the resorption. The same is true of the urea and chlorides; but phosphoric acid remains diminished during the entire duration of the disease.

8. *Morbus Brightii,* (two cases.) At the commencement, when the urine is loaded with albumen and blood, the quantity of urine in general, and that of urea and phosphoric acid in particular, is diminished; that of the chlorides is reduced to a minimum. But as soon as the healthy state is approaching and dropsy disappears, the quantity of urine and its fixed constituents are rapidly increasing. When the dropsical exudation is totally absorbed, urea, chlorides, and phosphoric acid are approaching the normal. If

recovery does not take place the quantity of urea is gradually diminished, even if the amount of urine excreted be enlarged. The increase of urea during the absorption of a dropsical exudation, is the consequence of the excretion of that material which, during the suspended function of the kidneys, was retained in the blood, and, on the other hand, deposited in the *transudates;* probably the nitrogen of the albumen contained in the serous infiltrations is transformed into urea. The augmentation of the urine and its chlorides is the result of rapid absorption of fluids.

Besides those diseases just referred to, BRATTLER examined two cases of *valvular disease of the heart;* one of *pericarditis;* one of *cholera;* one of *tuberculosis;* one of *syphilis;* one of *carcinoma;* one of *scorbutus;* and one of *emphysema;* and combining the result of his own investigations with that of others, he draws the conclusion that the urine in diseases does not undergo any specific change peculiar to any particular disease, but that the same is intimately dependent upon certain processes in the vital economy, and therefore the urine may offer the same character in very different diseases. It may be adopted, as a general rule, that the quantity of urine is diminished

1, in the beginning of all acute and febrile diseases;

2, in diseases of the kidneys, with obturation of the *bellinic* tubes;

3, in those diseases where the system loses great quantities of water, (cholera);

4, in those diseases of the circulatory and respiratory organs, where the amount of blood carried to the descending aorta and consequently to kidneys is diminished—(*diseases of the heart and pleurisy.*) The excretion of urine in general is increased during the absorption of hydropical exudates, in polydipsia, diabetes insipidus.

The relative amount of urea is diminished in the convalescent state of all acute diseases connected with great loss of organic material, in diseases of the digestive apparatus (*typhus and scirrhus ventriculi*), in diseases of the kidneys, disturbing their function, and in diseases of the articulatory and respiratory organs.

The relative amount of urea is increased in all acute diseases attended by fever, in absorption of hydropical exudates, and, after a removal of the impediment, in all diseases where in consequence of suspended renal function the blood has been charged for a long time with urea.

The *chlorides* are diminished in all diseases connected with exudates or transudations, in all diseases of the digestive organs interfering with digestion, and in disturbances of the kidneys suspending secretion. *Chlorides* are increased when hydropical exudates are absorbed.

Phosphoric acid is diminished in diseases of the kidneys with suspended secretion, and in affections interfering with digestion. It is increased in all diseases connected with fever; and after those affections where, in consequence of suspended renal function, the blood has been charged for a long time with the acid.

Reviews.

A Treatise on Fractures. By J. F. MALGAIGNE, Chirurgien de l'Hopital Saint Louis, etc., etc., with one hundred and six Illustrations. Translated from the French, with Notes and Additions, by JOHN H. PACKARD, M. D. Philadelphia: J. B. Lippincott & Co., 1859.

IN reviewing a work like this, which treats so copiously of the whole subject of fractures in all their known varieties—of the whole range of causes, symptoms, complications, and treatment—it is impossible to do much more than to call the reader's attention to those points which are new or important.

The author has derived his material from the large museums and hospitals of the French metropolis, as well as from the extended literature of surgery on this most interesting subject. In the present volume he has brought together the material thus acquired, but presents it to his readers in a form neither well digested nor always coherent in its parts. The value of the work depends more upon the abundance of the matter which it contains than upon inductions clearly drawn or forcibly presented. A great part of that which is written, seems rather a discussion of the various doctrines and practice of different authors, than a succinct statement of the author's own ideas of such doctrines or practice; and the reader arises from the perusal of the pages with no clear idea of the thing of which the author treats. In some cases, again, the author, even when he seems to put his conclusions plainly, fails to cover the whole subject—he falls short of what is well known, and, indeed, promulgates serious errors. Thus, in his resume of the healing of fractures, he says: "The callus, taking its origin from an effusion of lymph, assumes first the form of a reddish tissue, which passes afterwards into spongy bone. These are the three principal phases of the reunion of bone, and for this reason I admit in the living subject but three periods, corresponding to them as nearly as may be." Exceptionally to this he admits that "in young subjects the reddish tissue is in a great measure replaced by a tissue of fibro-cartilaginous aspect."

It seems to us that the author's conception of the process he describes is meagre. No mention is made of the fact that this reddish tissue (which in place of being the first substance seen, is, in truth, usually preceded by "a dimly shaded or granular substance like fibrine," Paget, *Surg. Pathol.*, p. 163,) may in its turn pass into perfect fibrous tissue. It is true that the "reddish tissue," which we suppose to be fibrous tissue in its rudimental state, may pass at once into bone—and this is probably the more frequent process; but it is also unquestionably true that the uniting medium may be developed directly into cartilage, fibrous tissue, or fibro-cartilage.

Again, our author asserts that the ultimate condition of the callus is spongy bone—a statement true in part only; for, as any one can easily satisfy himself by sawing open almost any specimen of fractured bone, of a few years' standing, the external parts of the callus nearly always present the usual characteristics of laminated bone.

No mention or even allusion is made to the manner in which overlapping bones unite, or to the disposition of the callus in the angles of accidental curvature; no description is given of the sealing up of the ends of fragments; no mention is made of the absorption of opposing surfaces of overlapping bones, of the restoration of the medullary canal, or of the final modelling of the fragments when the work of reparation is done. It seems strange that a writer of the author's known ability should have passed the most important in the whole list of curative measures without an allusion. There is no series of facts in the whole range of surgical pathology so pregnant with practical results and application—that show forth so beautifully, and to the reflective mind so wonderfully, the ever present, never ending beneficence of the Creator, the tender care that, not wearied by constant guardianship of the ordinary vicissitudes of life, stands ever ready in our direst misfortune. There may be "sermons in stones," but they are not always easy to read, and they disclose themselves to our reason only; but the sermon which the heal-healing of fractured bone pronounces, is obvious to the common eye, excites our deepest wonder and admiration, and at the same time touches the heart with a warmer feeling of gratitude to the Giver of all good than almost any thing which we have ever seen or read.

It seems to us that science loses much when its devotees pursue it without a reverential feeling, and a constant recognition of the *purpose* of the Creator. This recognition of a definite design in the means instituted, sheds a clearer light upon the means themselves, and weaves the disjointed facts into a consistent whole.

Turning from these obvious faults of the book, there is much in it to copy and commend. We take especial pleasure in referring to what our author says in regard to the stiffening and anchylosis of joints *resulting from the treatment of fractures*—a subject too little thought of by those who treat broken limbs.

The alterations in and about joints, impeding or impairing their motion, are, according to our author, due

1. To shortening of some of the ligaments;
2. To inflammatory adhesions; to which may be added,
3. Shortening of muscles.

He says, in regard to the first of these causes:

> "But aside from this disastrous termination, there very often remains, as has been said, a stiffening of the neighboring joints, the cause of which should be sought out. M. Teissier regards it as purely muscular; but this cannot be admitted. When we endeavor to give motion to these joints, it is not the muscles, but the ligaments which offer the principal resistance; if a slight movement is forcibly made, pain is induced in the ligaments themselves, and swelling occurs around the joints; the symptoms brought on are exactly similar to those of a sprain, and have a like origin,—the stretching of the ligament. How is it now that the ligaments should be stretched by movements not exceeding or even equaling their natural extent? What meaning is to be attached to the STIFFENING and CONTRACTION, as employed by surgeons?
>
> "It is very true that the ligaments, merely from being long kept at rest, tend to shorten, and that to a very notable degree. I have dissected fingers, long stiffened in a flexed position, and have more than once found the cartilages and synovial membrane sound, and the muscles free; the ligaments alone prevented extension; and if a sufficient force were exerted to obtain this, those fibres of the lateral ligaments closest to the surface of flexure were seen to stretch even to breaking. The tendons themselves become shortened; thus for instance the ligamentum patellæ, which is really but the continuation o the tendon of the quadriceps, sometimes loses half its original length, drawing down the lower fragment and twisting it in the most singular manner.
>
> "All positions of the limb are more or less conducive to contraction of the ligaments. In forced extension, it is those of the surface of extension which shorten most; thus the knee, long kept straight, hardly ever recovers to the full its power of flexion. Forced flexion acts on the opposite ligaments; for

instance the arm, long confined to the trunk, loses something of the motion of elevation toward the head. Semi-flexion shortens especially the lateral ligaments, hindering at the same time the extremes both of stretching and of bending, as is particularly observable in the elbow; so that the surgeon, surrounded by shoals, seems to steer clear of one only to strike upon another. Let this idea then be borne in mind, as important to the successful treatment of fractures; that position, whatever it be, is injurious only when combined with a too prolonged want of motion; and that the limb should not be retained in this dangerous immobility for a longer time than is absolutely necessary.

"I shall not dwell upon retractions of the muscles themselves; these belong as much to the history of organic affections of the joints as to the subject of fractures. I shall only add that they are nearly always associated with some degree of paralysis of the affected muscles and of their antagonists, and thus is explained in great measure the weakness of limbs in which the work of consolidation has been slow."

Our author, however, seems to us unaccountably to refer not only the shortening of ligaments to extension and want of motion, but he would have us believe that inflammation of the theca of tendons, and the consequent adhesion of these to the tendons, is due to the same cause. How these agencies could produce such results we can hardly divine. We can understand that stretching or loss of motion might, if continued too long, induce fatty conversion and consequent atrophy; or how inflammation extending to the joint surfaces might produce ulceration, and consequent adhesions. We can, also, without violence to sound pathology, believe that loss of motion might permit the formation and perfection of adhesive bands or the direct cohesion of parts; but we cannot admit that extension and loss of motion can with any propriety be regarded as the efficient cause of the disastrous results.

The practical results however are most important and our readers would do well to bear them in mind.

Not less important are some ideas advanced in regard to causes which may prevent or delay the union of fractures. These he indicates on page 129-30. "But those which we have still to study are of a different nature, in that the treatment itself gives rise to them in fractures which have the best disposition to unite. Such are (1) *the abuse of wet dressings;* (2) *the too early application of bandages;* (3) *excessively tight bandages;* (4) *the too prolonged application of bandages;* (6) *local scurvy;* (6) *motion of the fragments;* (7) *the premature use of the limb.*"

On the effects of *continued* irrigation, he quotes the well known cases of Nivet: "Thus of nine compound fractures, the history of which is given by M. Nivet, two only were united within the usual time; two required two and a half or three and a half months; two, five and seven months; one was dismissed without union at the one hundred and nineteenth day; and the remaining two died."

Our author most emphatically disapproves of the immediate application of the *bandage;* but he bases his objection to it on the sole ground of its delaying the union of the fragments. He says nothing of the possibility of mortification of the limb from this cause, and yet the records of our home surgery will show a good many limbs in which gangrene has resulted from the too early application of the bandage. Of the too great pressure of bandages we quote as follows: "The *too great pressure of bandages* is one of the causes of non-union most insisted on by A. Para; and after him, Wiseman in the seventeenth century, and Duverney in the eighteenth, agree in saying that nothing hinders so much the formation of callus. This is confirmed by experiment; thus, Delahaye having broken the leg of a young pigeon, and then compressed the limb tightly between two hollow splints, Duhamel, who assisted at the dissection, tells us that at the eighth day there was neither swelling of the periostium nor any disposition toward uniting. Troja obtained the same result in dogs, making pressure by means of bandages. Now, when we examine the first instances of non-union under the treatment by the immovable apparatus, we find that besides its too early application, its excessive tightness is mentioned, and I incline to the opinion that this latter is the fault."

Our author draws attention to the blanched, œdematous, wasted appearance of a limb bandaged too long, and suggests that the general and due nutrition of the limb is interfered with by the exclusion of air and light, as well as by the too long continued pressure of the bandage.

In reference to the use of apparatus, these general directions are given: Whatever the special apparatus used, it should,

1. Keep the parts immovable;
2. Protect the member, as much as possible, from excoriation, sloughing, œdema, and anchylosis;
3. Allow of the immediate inspection of any symptoms which may arise.

That portion of the work which treats of special apparatus is a perfect mine for the practitioner, and of itself possesses sufficient value to repay the purchaser for the cost of the work.

In regard to the date of the application of treatment our author agrees with the great majority of surgeons of the present day, in advising the reduction of the fracture at the earliest practicable moment, and for two principal reasons: first, that if permanent extension is necessary, less force is required when applied early; and, second, because the disturbance of the fracture at later periods is apt to produce a hurtful degree of inflammation. He lays down also the following proposition which we most heartily endorse: "*That in no fracture with swelling and inflammation, should any compressing apparatus, surrounding the limb, be applied until all danger from that source has subsided.* [This rule has for many years been observed in the Pennsylvania Hospital, and with very successful results. Whatever the fracture may be, if there is any tendency to inflammation, the latter is the first object of attention; and for the first few days, the limb is examined carefully at least once in every twenty-four hours.—*Translator.*"]

In speaking of the time for removing the dressing, he inculcates the rule of always removing it at the lapse of two-thirds of the time necessary for consolidation, so that any aberration of the fragments may be ascertained and rectified.

We do not think that our author gives, or that surgeons generally give enough attention to the bending and gradual displacement of fractures after the final removal of the dressing, especially in fractures of the lower extremity. We think that the outward flexion of the foot, which so frequently follows fracture of the fibula, is oftener produced by the bending of the callus *after* the removal of the dressing, than by any other cause. Most of the shortening of limb in fracture of the femur, we have no doubt, takes place after the patient begins to walk. We remember, in our own practice, two cases in point. With the view of determining this matter we measured daily for sixty days (the duration of the extension,) the injured limb in a case of fracture of the shaft of the former—on all of these days the broken measured a trifle more than the sound limb; on the sixtieth day the limb was measured as the patient laid in bed after the removal of the splints—the measurements were about equal; at the end of six weeks the limb was a half inch shorter, and at the end of a year nearly an inch shorter than its fellow.

In another patient, measured at the same intervals, analogous results were noticed. We cannot but think that most of the opprobrium cast upon medical men for deformities resulting from fracture, is due to the operation of causes in agency after the lapse of the usual periods of treatment. There is much more in the book which we might cull for the profit of the reader, but these remarks have already extended as far as the reader's patience will bear. We cannot in justice withhold the expression of our obligation to the translator for the faithful rendition of the text, as well as for the useful notes interspersed in the volume.

M. G.

Abstracts and Selections.

Use of Chloroform and Aconite in Neuralgia.—In a letter to the *Medical Times and Gazette*, Dr. Gueneau de Mussy writes:

"For more than three years I have prescribed it in neuralgia of different regions; but here I want chiefly to allude to the most common and severe of neuralgic pains—the facial neuralgia, in which I have derived from the above-named remedy sometimes a complete and permanent cure, and always an almost immediate and considerable relief. In such cases I apply it directly to the gums of the side affected, where numerous divisions of the fifth nerve are most superficial. When the neuralgia is idiopathic, *i. e.* unconnected apparently with any organic disease, the formula is:—2 parts of sp. of wine, or eau-de-Cologne, 1 of chloroform, and 1 of tincture of aconite; the finger covered with a piece of lint or soft thick linen, is dipped in the mixture and rubbed gently against the gum for a few minutes. I do not use a sponge, because it would take up too much of the liquid, which by pressure might drop into the mouth.

"When the pain is connected with some organic disease, as a deranged tooth, chronic inflammation of the gums, or of the sockets, or, as I have observed, superficial necrosis of the bone, I have found the tincture of iodine a very beneficial substitute for spirit of wine in the formula given above.

"The infra-orbitary branch being the most commonly affected, it is chiefly in neuralgia of this part the application has been successful; but by no means exclusively so; it answers very well in pain of the lower branch, and I have observed some very severe cases of supra-orbitary neuralgia, in which the same application has been attended with an equally satisfactory result.

"This shows, moreover, that the sedative agent may produce its effect, as the irritating one so frequently does, on a part distant from the spot on which it is applied in the same, and even in a different branch of a nerve."

Chlorinated Water in Dissection Wounds.—M. Garrigon states that repeated experience has convinced him of the efficiency of the treatment long since recommended by M. Nonat, of placing the hand suffering from dissection wounds in chlorinated water. The application will be always found efficacious, providing purulent infection have not already set in, when it will be useless.—*Med. Times from Gaz. des. Hop.*

Wood's Operation for the Radical Cure of Inguinal Hernia.—Mr. Wood brought to the notice of the gentlemen in the theatre, a boy on whom he had performed his operation for the radical cure of hernia fourteen days ago. The patient was a boy, aged 15, and had been ruptured for nine months. There was scarcly any difference between the two sides to be seen; but, on examination, the tissues about the rings could be plainly felt, like a hardened mass, completly preventing any escape of the intestines. The patient recovered without any drawback, and had now no pain or uneasiness, not even on jumping, etc. On account of the patient's restless habits, Mr Wood considered it wise to apply a truss as a precautionary measure. He stated that this was the fourteenth case in which he had now performed the operation, and in all with success. In one only was there any permanent drawback. In this case varicocele had followed the operation. In another case varicocele had followed, but disappeared again after a short time.—*Medical Times and Gaz., Nov.* 1859.

On the Glucogenic Function of the Placenta.—The following are the conclusions of M. Claude Besnard's Memoir, recently presented to the Academie des Sciences:

1. The placenta of mammalia performs a function hitherto unrecognised, and which seems to supply during the

early periods of embryonic life, the place of the glucogenic function of the liver. This function is localised in a glandular or epithelial element of the placenta, which in certain animals is mingled with the vascular portion of the organ: but in ruminants it is found separate, forming plates of an epithelial appearance on the amnios, which every one must have seen, though not apprehending their signification. 2. This temporary hepatic organ of the placenta, allowing of the direct study of the production of the glucogenic matter in an isolated anatomical element, confirms and completes by a new example, what I have long since declared, viz: that the formation of the glucogenic amylaceous matter is a faculty common to both the animal and vegetable kingdom. We here see it accumulating around the animal embryo, just as in plants it accumulates in seeds around the vegetable embryo. 3. The glucogenic function commences then in animals from the origin of fœtal life, and before the organ in which the function is located in the adult has become developed. It is located in a temporary organ belonging to the appendices of the fœtus. 4. All that has been advanced in this essay relates solely to the glycogenic functions of the liver: but actually it remains to be examined whether the biliary function exercised by the liver in the adult is also accomplished in the hepatic placental organ here described. The question may be put in the following terms: Are the same glandular cells charged with two functions which must be considered as connected and reciprocal; or, must the liver be regarded as a compound organ, in which distinct anatomical elements are combined, the one destined for the formation of amylaceous, the other of biliary matter? This question, which anatomists have been unable to solve, in spite of the numerous histological labors the liver has been the object of, appears to me to be capable of being elucidated or even decided by means of physiological investigations, made on the one hand upon the embryonic development of the function, and in the other on the lower animals. Such an investigation I have undertaken, and will communicate the results as soon as I have completed it.—*Gazette Medicale*, 1859.

Condition of the Uterus after Delivery.—Dr. Priestly, in a Lecture, published in the *Med. Times and Gazette*, for October, 1859, relates several observations which show that the uterus is not stripped of its mucous membrane during an ordinary labor. According to M. Collin and M. Robin, about the fourth month of pregnancy a new membrane begins to be formed under the old one, now forming the dicidua uteri. This increases little by little until the expulsion of the fœtus. At this period the exfoliated old mucous membrane, the decidua, is cast off in its major part, but it leaves some shreds, looking like, and mistaken for, shreds of muscular tissue, adherent to the surface of the new mucous membrane.

Atropine in Epilepsy.—Dr. Maresch does wonders with atropine. He is physician of a Lunatic Asylum at Vienna. His experiments were made on eight females in one section of the establishment, and upon four men and six women in the section of Incurables. Of the eight females, three were cured outright, and the state of five was greatly and markedly improved. Of the ten incurables, eight had the violence and frequence of their epileptic seizures notably diminished. One-fiftieth of a grain of atropine caused dryness of the throat, difficulty of speech, and aberration of vision.—*Medical Times and Gaz.*

M. Bourguet relates a case of peritonitis produced by the escape of two lumbrici into the peritoneal cavity. The worms had eaten their way, he says, through the upper part of the ilium, leaving a circular opening there. There is a preparation at Malta in which the worm is seen partly in the gut and partly in the peritoneal cavity.

On the Administration of Medicines to Children. By M. Wahu.

M. Wahu having much to do with the diseases of children, wishes to impress upon Practitioners the importance in the case of important medicinal substances, having them administered, whenever practicable, in their own presence. He also states some of the means he adopts to enable certain medicines to be more easily got down. Thus the subnitrate of *bismuth*, in large doses, which is of such value in diarrhœa and the gastro-intestinal affection of children, often subsides to the bottom of the spoon when given in broth or milk; and it is much more readily taken also by children of about two years old when given in chocolate prepared with water and thickened with tapioca or crumbs of bread. In this way seventy grains and more may be given night and morning. In the same way *iron* can be very readily given. *Rhatany* and *catechu*, two precious drugs, the action of which, when in small doses, is soon manifested in children, can also very readily be given in this chocolate panada. Chocolate made with either milk or water, and flavored with canella or vanilla, is usually very readily taken by children, and its dark color facilitates the mixing of numerous colored medicinal substances, which would be observed by the little patients were they given in milk, broth, or any infusion. Rhatany and catechu may may also be well triturated and mixed with quince jelly, the flavor of which, while masking that of other substances, is very agreeable to children. *Sulphate of soda* and *sulphate of magnesia*, are substances very difficult to get even adults to take. The sulphate of soda may often be administered to children, by dissolving 10 parts in 150 of unsalted beef tea, and waiting until the child is sufficiently thirsty to swallow a cup of liquid almost without tasting it. For adults, the best means is to dissolve the sulphate of soda or magnesia in exactly the quantity of hot water necessary for its complete solution. This is allowed to get cold, and a glass of pretty strong lemonade is prepared. Holding a glass in each hand, that containing the salt is rapidly drank, and then the lemonade is slowly drank—masking the detestable taste of the purgative, and supplying enough fluid to prevent its proving too irritating. *Corsican moss* is another substance which children take with difficulty; but if an infusion be made and strained, and then added to unsalted beef-tea, it will be readily swallowed. *Calomel* is one of the most difficult medicines to give, when children are too young to swallow pills, which is the case under six years of age. Incorporating it in honey is the best means—rinsing the mouth afterwards to prevent any adhering to the gums. It should never be given in current or any other jelly; a death having occurred a few years since from the conversion of the calomel given in current jelly into a bichloride. It is safest to prohibit any acid drink being taken on the day that calomel is given. *Ipecac.* may be given either in the chocolate panada or in honey. When it is impossible to give any medicinal substance by the mouth, it may be administered by the rectum, taking care first to empty the gut by tepid water or an emollient decoction, and that the bulk of the medicated enema do not exceed from four to six ounces, so that it may be retained and absorbed. It should also be borne in mind that as some substances, such as opium and other narcotics are easily absorbed by the large intestine, doses less than would be given by the mouth must be employed. Quinine, on the contrary, requires to be doubled in quantity to be of any use. In forcing a child to swallow, the usual practice is to pinch the nose; but a part of the medicine will be rejected, if precaution be not taken to keep the nares completely closed *until deglutition is completed.* So, too, when medicines are thus forced down a child, it must be kept the whole time in a *sitting posture* until deglutition has been completely accomplished. A suffocative cough may be induced, if it be allowed to lie down again still having some of the liquid in the mouth.—*Med. Times and Gaz.* from *Gaz. des Hop.*, 1858.

Professor Faraday on Schonbein's Ozone and Antozone.— Schonbein has been led to the belief that oxygen can exist in a third state, as far removed by its properties from ordinary oxygen in the one direction as ozone is in the other; and therefore, in a certain sense, antagonistic to ozone. This substance he names antozone, and believes that it also enters into combination, retaining, for the time, its special properties. Hence there is not merely ozone and antozone, but also ozonide and antozonide compounds. Thus, permanganic acid, chromic acid, peroxides of maganese, lead, cobalt, nickel, bismuth, silver, etc. form a list of bodies containing ozone in combination; and the characters of ozone, and of these bodies because of the ozone in them, is that they are electro-negative to the antozonides, *i. e.* as copper to zinc; they evolve chlorine from chlorides; they cannot generate peroxide of hydrogen; and they render blue the precipitated tincture of guaiacum. On the other hand, oxywater and the peroxides of potasium, sodium, barium, strontium, and calcium, form a list of substances containing antozone. These bodies are electro-positive to the former; they cannot evolve chlorine from hydrochloric acid, or the chlorides; they evolve the peroxide of hydrogen when treated either by oxy-acids or even the hydrochloric acid, and they not only do not render blue the white precipitated guaiacum, but they restore that which has been rendered blue by ozone to the white or colorless condition. Now, when two ozonides or two ontozonides are put together, with the addition of water or an indifferent acid, they mingle, but do not act on each other; but if one body from each list be associated in like manner, they mutually act, oxygen is evolved from both, and ordinary oxygen is set free; or rather, as Schonbein believes, ozone separates from one body, and antozone from the other; and these uniting, produce the intermediate or natural oxygen. Thenard, who discovered the peroxide of hydrogen, showed that the peroxide of silver, when brought into contact with it, not only caused the separation of part of the oxygen of the fluid, but also itself lost oxygen, that element leaving both bodies, and appearing in the gaseous state. As to the independent existence of oxygen in these two new and antithetical states, ozone has been so obtained, *i. e.* out of combination, and independent of any other body; but antozone has not as yet afforded this proof of its possible separate condition. Oxywater is the compound in which it seems nearest to a free condition. As Schonbein's view includes the idea that oxygen in these two states can retain their peculiar properties when out of combination, and have them conferred otherwise than by combination, and as ozone does fulfil these conditions, and does exist in the independent state, so it is important that antozone should be pursued by experiment until it gives a like result. In relation to this subject the view of Mr. Brodie should be referred to, respecting the condition of certain elements at the moment of chemical change, on which he published a paper in the Phil. Trans. for 1850, p. 759, and another in the Chemical Society's Journal in 1855. He assumed oxygen as capable of existing in two states; the particles being polarized to each other by the action of associated particles, and for the moment in the relation of oxygen and hydrogen to each other; he also made many numerical experiments for the purpose of obtaining the equivalent action of the oxygens assumed to be in these opposed polar states.—*Med. Times and Gaz.*

Smoking, the exciting cause of Cancer.—M. Bouisson has published a valuable article in the *Montpelier Medical*, wherein he endeavors to prove that smoking is often a very active exciting cause of epithelial cancer about the tongue, lips, sides of the cheeks, or soft palate.

M. Bouisson has collected sixty-eight cases of cancer and cancroid of the lips, in which the habit of smoking was either carried to excess or was very inveterate. He considers that such morbid products have more frequently been seen since the custom of smoking has become general; but concedes that, for the development of cancer, there must be the proper diathesis. The author maintains, however, that this tendency would often have remained latent without the local exciting cause to which we have alluded. He further states, in support of this opinion, that labial cancer mostly attacks the lower lip, where the cigar or pipe rests; and that such cancer is rare with women and children. One young lady is mentioned who suffered from the affection; but she used by stealth to smoke immoderately.

The more inveterate the habit, the more frequent the cancer, especially with those who smoke short pipes and strong tobacco. Cleanliness, long pipes, and mild tobacco, may keep off the complaint.

M. Bouisson operated upon a medical man of Barcelona, who, in the Spanish fashion, allowed the smoke of cigarettes to escape through the nose. The nostrils were filled with epithelial vegetations.—*London Lancet.*

Diphtheria affecting wounds made by surgical operations.—M. Guersant, in speaking of diphtheria at a meeting of the Society of Practical Medicine of Paris, said that between 150 and 160 cases of the malady had occurred at the Children's Hospital during the first half of the present year. He added that, in private practice, and at short intervals, he had operated in three cases of phymosis in children, living in different districts, and whose parents are in good circumstances. Three days after the operations, a diphtheritic coating covered the wounds, and the malady from thence attacked the tonsils. Chlorate of potash was given, and the children recovered.

The mother of one of the patients took the disease, and got well. In the family of another of the children, the father, a brother, and two servants sickened of diptheria. They all recovered, except the brother, who being struck with great terror at the complaint, died, as if poisoned, in a slow asphyxia.—*London Lancet.*

Glycerine Ointment for the Itch.—M. BOURGUIGNON, so well known in Paris by his successful researches on "the acarus scabiei," has published in the *Gazette Medicale*, the following formula. One general friction, not preceded by soap ablutions, is sufficient:—Yelks of two eggs; essence of lavender, lemon, and mint, of each seventy-five drops; essence of cloves and cinnamon, of each 120 drops; gum tragacanth, half a drachm; well-pounded sulphur, twenty-six drachms; glycerine, thirty-two drachms. Total weight, nearly eleven ounces. Mix the essences with the yelks of egg, add the gum tragacanth, make a good mucilage, and then add very gradually the glycerine and sulphur.

Many cures have been obtained by this preparation, which has the advantage of giving no pain.

The well known Helmerich ointment being really useful, M. Bourguignon has modified it, and substituted glycerine for the axunge. In the altered form, the preparation is not any dearer, as efficacious, and less painful than the original ointment. It does not grease the clothes, and has an agreeable perfume. Gum tragacanth, fifteen grains; carbonate of potash, thirteen drachms; well pounded sulphur, twenty-six drachms; glycerine, fifty-two drachms; essence of lavender, lemon, mint, cloves, and cinnamon, of each fifteen drops. Total weight, nearly eleven ounces. Make a mucilage with the gum and one ounce of glycerine, add the carbonate, mix until it is dissolved, and then gradually add the sulphur and glycerine; lastly, pour in the essences. With this compound, M. Bourguignon advises two general frictions of half an hour, within twelve hours of each other, and followed, twenty-four hours afwards, by a simple warm bath, as the glycerine is soluble in water. Two-thirds of the preparation should be used for the first friction, and the other third for the second.—*London Lancet.*

Treatment of Ascarides.—Dr. JAMES BIRD writes to the *Medical Times and Gazette*, Nov. 5, 1859:

"I beg to recommend for the use of those who are at present laboring under the complaint, two substances, from the employment of which I have seen incalculable benefit, and succeeded in eradicating intestinal worms, and in many instances effecting a perfect cure. These substances are vegetable charcoal and common salt. The method in which I employ the latter has this peculiarity: I advise it to be taken dry, with a little bread or biscuit, and not in solution—a small teaspoonful is the quantity I give an adult, the first thing in the morning; to children half that quantity. Salt taken in this manner has a widely different effect on the stomach to that produced by salted meats, or when dissolved in broth or water. The pure salt taken in the way proposed is decomposed, and the chlorine liberated before it enters the general circulation, and thus comes more immediately in contact with the thick mucus which forms, it is supposed, the nidus in which the ova of all worms are deposited, and in this manner destroys them. Immediately after breakfast, from twenty to thirty grains of purified charcoal, mixed with a little sugar, and a very little water or weak tea, should be taken; and this quantity repeated after the three principal meals daily: if the sugar is omitted the charcoal answers equally well in a wineglassful of water. In a fortnight's time this treatment is generally successful, though the charcoal may be continued advantageously for a longer period. Both these medicines are highly useful in correcting the evil consequences of malassimilated food. Charcoal, in particular, is a remedy of singular efficacy in most of the gastric disturbances that proceed from the above named cause, and for all those persons who are martyrs to the maladies incidental to a stomach in difficulties,—maladies that make people miserable, without sending them to bed or absolutely destroying them,—I know of no remedies more deserving of commendation than charcoal and salt. Neither substance can do the least harm to the intestinal walls, while both are correctives of that tendency to rapid putrescency, that pervades all food that is not properly digested; an effect that is invariably followed by all the evils attendant on poisoned blood. Let this fact, however, never be lost sight of, that simple as these medicines are, their adaptation to individual cases requires judgment, careful watching, and professional knowledge, and that their administration should not be undertaken without due consideration."

On the Introduction of Medicinal Substances through the Milk of Animals. By M. Labourdette.

M. Labourdette, in his communication, gives an account of some extensive investigations he has entered into; and M. Bouley, reporting on the paper, enters also into a general review of what has previously been done. A most extensive series of experiments had been previously performed by MM. Chevallier, and O. Henry, and the results of these were unfavorable, inasmuch as under the administration of medical agents, capable of imparting a therapeutical agency to the milk, the animals lost their health, and at no remote period died.

M. Labourdette commenced his experiments by administering iodide of potassium to cows and goats, which in a very short time gave rise to various accidents; and, in all the cases in which it was not suspended, at the end of a few weeks the animal either died, or entirely lost its milk. In this way eighteen animals were sacrificed, notwithstanding the various means adopted to counteract the ill effects of the drug. But these experiments were performed in Paris, and M. Labourdette determined upon repeating them in one of the finest Normandy pastures. There, in dairies and stables of exquisite cleanliness, he has kept cows and goats for five or six years in perfect health, notwithstanding that their milk, as observed personally by the reporter, is impregnated with iodine, mercury, or arsenic. One of the first facts ascertained by M. Labourdette was the ill effects of sequestration. In Paris a cow was not to be kept alive longer than four months, providing that the iodine was not suspended; and even in Normandy, if the cows were kept three, or even two days in the stables, without resorting to the meadows, the same ill effects observed at Paris began to be developed. But even pasturage and free roaming, although essential, were not found to suffice without the aid of an excellent regimen, and the administration of medicinal agents, termed by M. Labourdette *adjuvants* and *correctives*. We have not space to give the details of these, but must refer to the paper for them, as well as for an account of the means by which the animals were induced to take the large doses required, and the mode of treating injurious effects when they appeared. Iodide of potassium constituted at once the most desirable, and the most difficult agent to introduce, being the one tolerated with most difficulty by the ruminant. Next to it in difficulty came mercurials, ferruginous and arsenical preparations being much more easily tolerated, while alkalies, and the chloride of sodium were always taken with pleasure by the animal, the latter being employed as an adjuvant with respect to other substances. The milk of animals thus treated became richer in casein and butter, this being probably due to the regimen employed.

M. Boudet, while admiring the persevering efforts of M. Labourdette, carried on through ten years, still could not admit that the results promised to prove of much practical utility. The small quantity of iodine, for example, that should thus be communicated to the milk, rendered this fluid far inferior in this respect to cod-liver oil; and while in the latter it existed in a natural organic combination, in the former it was only got in by doing violence to the habits of the animal. To act therapeutically, very large quantities of this milk-diet would be required, which might be ill-supported, or in other respects, objectionable. M. Trousseau observed that he did not believe that the quantity of a substance administered constituted all its consequence. Thus, for example, in the treatment of chloro-anæmia by iron, it was long believed that the iron was only of efficacy when it gained a bodily entrance into the blood, to supply the deficient coloring-matter. It was believed that the minute portions of iron wanting to the blood of a chlorotic woman, were replaced by a certain amount of the enormous quantities taken by mouth. This theory of the action of iron is now pretty generally abandoned. It is admitted that it acts to a certain extent by modifying the functions, especially operating on the assimilatory functions in such a manner that small portions of iron may be absorbed and utilised, independently of the quantity that has been administered, *i. e.*, that the assimilation operates just as well upon the iron introduced by alimants, as upon that which may be given in large doses. What is here said of iron may be repeated concerning other medicinal substances to which a purely dynamic action is very generally attributed. Mercury, for example, acts in no other manner in syphilis. No one ever supposed that the direct contact of the mercury with each living particle is necessery for the purpose of neutralizing the syphilitic virus throughout the economy. If this were the case, it is evident that the milk of a cow submitted to the mercurial regimen, in order to be efficacious, should contain far larger quantities of mercury than have been discovered in it. "But I am convinced that this milk, independently of the mercury which it contains, acts also by virtue of the properties imparted to it by the general condition induced in the animal by the mercurial regimen. We are daily submitting nurses to a mercurial treatment, intended to act upon infected infants, and although the quantities given to these women are not to be compared to those which these animals were made to take, it is no less true that the health of the nursling becomes re-established. As to cod-liver oil, I am not so certain as M. Boudet, of its owing its efficacy to its iodine; for similar effects are produced by other oils containing not a particle of iodine, or simply by animal facts." M. Piorry could not very well understand M. Trousseau's theory of the action of iron in chlorosis; and, with respect to his doubts as to the agency of iodine in cod-liver oil, M. Piorry is enabled to refer to 800 cases of phthisis in which amelioration was brought about by iodine alone: and here it is the iodine acting directly just as it is phosphate of lime in softening of the bones. M. Chatin suggested that these experiments would be best carried on by causing vegetable substances first to absorb medicinal solutions, which they will readily, and then feeding the animals with these. For example, a plant living in an iodised liquid will absorb an enormous portion of iodine, and iodine thus assimilated by a plant becomes a very energetic agent. M. Bouley replied that however seductive physiologically this plan may be, it would be impracticable. M. Labourdette had already expended 40,000 francs on his experiments; but this preliminary vegetable assimilation would require the cultivation of large grounds, and watering them with a very expensive fluid.—*Med. Times and Gaz.*, Nov. 5, 1859, from *Bulletin de l' Academie.*

The Croup-Process. By DR. FORGES, Physician for Diseases of Children at Pesth.

The cause of this morbid process is still involved in much obscurity, notwithstanding the efforts of many experienced and qualified physicians. A long time may yet elapse, and many ingenious theories be conceived by anatomists and practitioners, before the true one is established. We are justified, therefore, in removing the discussion of this mysterious process, by making the following attempt at its explanation.

The characteristics of the croup-process are:

A. the fibro-albuminous exudation as a symptom of inflammation. B. Paroxysms of suffocation terminating in death.

A. *The fibro-albuminous exudation a symptom of inflammation.*

Under this head are to be considered the following points:

1. Are the symptoms of croup those of genuine inflammation?

a. From a clinical point of view.

b. From an anatomico-pathological point of view.

For the sake of clearness, I may be permitted to compare the course of croupous pneumonia with laryngo-trachael croup.

a. From a clinical point of view.

Croupous Pneumonia.	Laringo-Tracheal Croup.
High fever and symptoms of inflammation from the beginning.	Fever and inflammatory symptoms are often absent in the beginning.
Local pain, local burning heat upon the corresponding wall of the thorax.	Seldom are there local pains—no heat of the larynx.
Crackling and rattling respiration; sputa yellowish, afterwards inspissated.	Sibilant respiration, bruit de drap; sputa always albuminous and coagulated.
With increasing illness the circumscribed rednesss of the face becomes darker, the skin drier, and the body hotter.	Face always pale, except during the paroxysm of suffocation—the skin moderately warm, or cool and moist.
The mouth hot and dry.	The mouth warm and tongue moist.
Pulse hard and full.	Pulse soft and small.
Dyspnœa general, and gradually increasing.	Paroxysmal dyspnœa, often greatest in the beginning.
Delirium.	Intelligence clear until death.

After exudation the inflammation involves the adjoining or opposite parts.	The exudation is repeatedly deposited—oftentimes for a fortnight afterwards—in the trachea and larynx, and extends in a third of the cases to the bronchii.
The more abundant the exudation, the more violent the symptoms.	The exudations are usually abundant, and, with the exception of paroxysms of suffocation, the symptoms are obscure and threatening.
The termination is different, according to the severity of the disease. In most cases, it is in recovery, and but seldom in suppuration, gangrene, etc., etc.	Recovery is rare, exudation continues until death by suffocation; the tissues and mucous membrane remaining unchanged.

b. From an anatomico-pathological point of view.

There is an abundant development of cells, a moderate exudation of fibrine and extravasation of blood.	Trifling development of cells, excessive fibro-albuminous exudations, without extravasation of blood.
The exudation undergoes metamorphosis.	The exudation is found always the same, even in the cadaver.
The mucous membrane and the submucous cellular tissue exhibit changes corresponding to the condition and course of the disease. Thus we find them dissolved, thickened, softened, hardened, suppurated, gangrenous, etc., etc.	The mucous and submucous cellular tissues exhibit no changes, or but very slight changes, which do not in the least correspond to a disease affecting tissues so deep as these.

From this comparison, it follows that laryngo-tracheal croup is, 1st, from its want of symptoms, not a genuine inflammatory disease. 2d, it is not a local disease, because the tissues of the larynx and trachea are not in the least changed by it.

We find, then, that the larynx is only the theatre or point where the disease exhibits itself, and the question now arises as to its proper seat. Is it in the blood? In severe and obstinate acute, as well as chronic diseases, it has been usual hitherto to attribute to the blood a peculiar morbid activity, producing, according to the process existing at the time, *materies morbi*, which, circulating, is at length thrown off with more or less disturbance in any predisposed locality, leaving the blood in a purified condition. This doctrine of crasis or discrasia of the blood, which speaks of syphilitic, arthritic, or scrofulous opthalmia as a syphilitic, arthritic, or scrofulous discrasia, and of croup and other inflammatory diseases as a fibrinous crasis or discrasia, etc., is now exploded.

The blood is the liquid life; that is, it contains all the principal elements of the human organization, partly in a liquid and partly in a plastic state. But all its morphologic and amorphous parts are introduced into it, and are no more the product of its activity than gold is the product of gold-carrying rivers. The blood corpuscles come from the liver and spleen, the albumen from the lymphatic glands, and the salts are introduced by endosmosis. Vital force, then, may be wholly confined to the restoration of the stœchiometric or elemental relations of the organism, to the preservation of the crasis or constitution peculiar to the individual, and to the equalizing, by means of exosmosis and endosmosis, the unequal plus or minus existing at any time in these several respects. The blood, therefore, in its course merely receives and delivers. It may even receive obnoxious substances, which temporarily change its composition or partly destroy it, as, for instance, carbon; but it cannot produce or develop substances either good or bad; and so far as this is concerned, there can be no question about discrasia. The idea that the blood can produce *materies morbi*, to be ultimately deposited in some irritated or predisposed organ, must henceforth be given up. The blood can carry these morbid elments to any organ, but some other organ must previously have introduced them into the blood.

In regard to croup, therefore, it follows that the blood itself cannot form, but only convey to the larynx the morbid products peculiar to this disease, and that their origin must be sought for elsewhere than in the blood.

Now, since the albuminous material, the presence of which forms the most essential symptom of the croup-process, can be produced neither by the mucous membrane nor by the blood, the seat of the disease must be in those other organs which are constantly producing and restoring albumen to the blood.

The laboratory for albumen, both in health and disease, is the lymphatic glands. The opinion of physiologists, that albumen and fibrine are used in the organism in the same form as offered in alimentary substances, cannot, in the progress now making in chemistry and physiology, be long maintained.

The circulatory system, therefore, is not solely a system of tubes, whose office is to distribute the blood-making elements introduced into them from without, which, entering into combination with various other ingredients of the food, becomes then qualified and capable for the maintenance of the individual organism. Doubtless human albumen is more perfectly fitted for the construction of organs which are the media of thought, feeling, and will, than the albumen of plants.

The normal as well as abnormal production of albumen must, therefore, take place in the lymphatic glands, and in the case of croup especially, in those so largely distributed about the larynx and trachea; and the extensive network of lymphatic vessels with which these glands are connected supplies them constantly with fresh material.

Increased formation of albumen also takes place in pneumonia and other inflammatory diseases of the mucous membranes. The albuminous exudations of croup are distinguished from all similar ones, however, aside from their specific inherent qualities, by the fact that they do not undergo any decomposition, but are always expectorated, vomited, or evacuated unchanged and spontaneously, and without any oppression of breathing, if deposited, in the first instance, in bronchial tubes of the second size.

A state of increased productiveness on the part of an organ presupposes a state of irritation. Can this be proved true of the glands in the case of croup?

So far as regards the pathological anatomy of croup, the results are altogether negative. Berthe merely says, "that the bronchial glands are generally large and soft."

The proximate cause, however, of the irritation of the lymphatic glands is probably a miasm having the same affinity to these that typhoid-miasm has to the abdominal glands. The glands receive the miasm in the first instance, are affected by it, react with increased energy, and pour out, with slight symptoms of local inflammation, their products upon the larynx and other organs. If asked, Why to the larynx? we answer, that this organ, so prominent as an intermediate agent between the individual and the external world, is, at the age of from three to seven years, in full course of development, and consequently in a physiological state of excitement, and for that reason a point less likely than another to resist disease.

Cold, mechanical irritation, or chemical agencies, do not produce croup.

B. *Paroxysms of suffocation terminating in death.*

These have been quite ingeniously explained by referring them to the swelling of the mucus membrane, especially of the glottis, and to the diminution of the calibre of the trachea, from the exudation poured out upon its inner surface. The following facts, however, are inconsistent with this explanation. Paroxysms of suffocation frequently appear before any cough is heard.

In simple laryngitis, swelling, croupy sound, and exudation appear without such attacks; they occur even when no false membranes can be detected during life, or found after death; or when such membranes are no longer found in the larynx, but in the deep-seated bronchial tubes only. They terminate without the exudation being removed; and finally, that in similar diseases, such as severe catarrhal inflammation of the lungs, extensive pneumonia, or pleuritic effusion, however severe may be the dyspnœa, no paroxysms of suffocation appear.

Then another explanation was suggested. It was said that "the muscles of the larynx are infiltrated, œdematous, and therefore unable to keep open the glottis." Aside from its incorrect physical basis, there should, according to this explanation, be no paroxysms at all, for the patient would be suffocated at the moment such infiltration occurred.

Thus, finally, croup is to be explained as something intermediate between the inflammatory and spasmodic diseases of the respiratory organs.

I consider the paroxysms as spasms, which are produced by the influence of the croup-miasm on the nerves of the neck, similarly to what we find occurring in the case of typhus.

That croup, however, is due to a miasm, is indicated by the following:

(*a.*) By the adynamic character of the reaction, as shown by the small, weak, and quick pulse; the somnolence; the contradictory nature of the symptoms, as shown by a cool, pale, moist skin, with absence of thirst, in a disease so severe and acute as this; from the fact that the longer the duration of the disease, the quicker become the movements and the clearer the sensorium; that sudden attacks of laryngeal breathing occur in the midst of the most perfect health; from the livid redness and gradual œdema of the parts predisposed to exudation; that death occurs without much, and frequently without any, exudation.

(*b.*) Epidemics are caused always by a miasm. Sporadic croup, like sporadic typhus, is also a miasmatic disease.

From what has been said, it follows that croup is a miasmatic disease, involving primarily the lymphatic glands of the respiratory organs, and localizing its products on the mucus membrane of such organs.

I may be permitted to add a few conclusions derived from experience.

1. That there exist family predispositions to croup; the disease affects lymphatic children.

2. Croup results as little from laryngeal catarrh as typhus from gastric fever. A catarrh may arouse, however, the predisposition to the miasm.

3. Emetics arrest croup if administered at the time of miasmatic infection; but can this time be ascertained with certainty.

4. There is no direct treatment of croup. We know neither the nature of the miasm, nor have we a specific antidote for it. The indirect method of cure consists in depressing the increased activity of the lymphatic glands. From the traditional treatment, with very rare exceptions, I have seen not the least benefit.

5. Emetics, as well as tracheotomy, fulfil only vital indications.

6. Depletion has just as limited application as in typhus.

7. Cauterization can disturb the localization, and postpone, but cannot stop, the course of the disease.

8 In the milder forms of the disease, where the morbid process becomes speedily exhausted, the miasm being less concentrated, recovery may, but seldom does, take place.

9. As all miasmatic diseases may develop contagion, children should be kept from croup patients.

10. The fever is the only criterion of the course of the disease. As long as the pulse does not return to its normal standard, the prognosis is doubtful. L. J.—*Amer. Med. Monthly*, from *Wiener Med. Wochenschrift.*

Iodide of Ammonium in Syphilis.—As the result of several trials made by M. Gamberini, of Bologna, it is stated: 1. That it is suitable in all cases in which iodide of potassium and sodium are employed. 2. It leads to a rapid cure. 3. The quantity given daily may be carried as high as from half dram to half ounce, and intolerance is rarely exhibited. 4. Employed in friction with olive-oil, it causes the disappearance of nocturnal syphilitic pains. 5. The signs of intolerance are a sense of burning in the throat and heat of the stomach; these rapidly disappearing on the suspension of the medicine for a couple of days. 6. Under the internal use of this medicine indurations consecutive to hard chancre disappear, as do also the indurated ganglionic pleiades in the groin. 7. Arthralgia, rheumatoid affections, periostitis, enlarged glands, and papulo-vesicular syphilide of the back, are the forms of syphilis which have best yielded to this drug.—*Bull. de Therap.*

Chloride of Sodium as an external Resolvent.—M. Ancelon affirms that chloride of sodium employed externally, whether in powder, or incorporated with lard or linseed oil, forms a most admirable resolvent of indurated lymphatic glands. Frictions made with a pomade composed of it will induce an eruption resembling variola, which proves of great use in pulmonary phthisis and in chronic affections of the alimentary canal.—*L' Union Med.*

Citric Acid in Acute Rheumatism.—Dr. Hartung states that this substance acts more efficaciously than lemon-juice in acute rheumatism. He forms a mixture with six drachms dissolved in five ounces of water, sweetened with two ounces of syrup. This to be taken in from fifteen to thirty-six hours, the patient also drinking as much cold water as he pleases, and the parts being wrapped in wadding. Of forty-five cases of acute rheumatism, some of them very bad ones, so treated, in two only was the result not satisfactory. Sometimes, even after twenty-four hours of treatment, there is a notable diminution in the pain and fever, although in most cases from two to three days are required to produce this amendment. The remedy does not induce diarrhœa, and it favors transpiration.—*Gaz. des Hop.*

Arsenic in Cholera.—Dr. Black relates some cases showing the efficacy of arsenic in the treatment of cholera, in which the results were so remarkable, that they might almost be called marvelous. He says, "in placing this high value on the anti-choleric virtue of arsenic, I yield, not to enthusiasm, but to experience—an experience which, at the present moment, embraces the treatment by this remedy of nearly two hundred cases, in none of which has the arsenic ever failed to produce a speedy and permanent cure. What other remedy, empirical or rational, has produced such results? It is certain that the records of medicine, so far as I know, do not furnish a parallel."

He proceeds to give the record of three cases. In the first he found the patient in the following condition:

"His countenance was haggard and shrunken in the extreme; eyes hollow; nose and the parts around the mouth of a deep leaden hue; skin very cold; breath cold; voice hollow, squeaking and tubular; frequent thirst; pulse scarcely perceptible; breathing hurried and labored. He had not passed urine since four the night before. A constant moaning was heard, except on the return of cramps, which occurred every three or four minutes, when his sufferings excited loud cries of pain. The purging and vomiting were all but incessant, the vomit and dejections being copious, thin, and evidently serous in their character. He was ordered five drops of liquor arsenicalis every fifteen minutes until the symptoms became less urgent, and then to have the same dose every hour until my next visit. Twelve A. M.: After the first dose of arsenic there was no return of cramps; the third dose was followed by a complete arrest of purging, while vomiting had occurred but three times during the interval of my first and second visits. The countenance still maintained a haggard expression; the nose in part its leaden hue; a slight degree of warmth was beginning to creep over the skin, and the pulse was now distinct at 120 per minute. Thirst was much less frequent; the breathing less hurried and labored; but neither had the voice lost its peculiar tone, nor had the secretion of the kidneys as yet been restored. He was ordered to take the usual dose of arsenic every hour. Nine P. M.: The bowels were moved once at three P. M., the evacuations being scanty, and of increased consistence. Has vomited twice, but has experienced no return whatever of cramps. Skin warm; no secretion of urine; pulse 100, larger. To take three drops of the arsenical solution every third hour.

"Sept. 24th.—Nine A. M.: Neither purging, vomiting, nor cramps since last visit. Skin hot, face flushed; thirst; pulse 96 per minute, full and strong; passed half an ounce of urine at six this morning for the first time since the commencement of the attack. To discontinue the further use of arsenic, and to take a mixture consisting of the acetate of ammonia, potassa-tartrate of antimony, spirit of nitrous ether, and water."

The second patient sickened at noon, and at 6 P. M. there was "coldness of the general surface, shivering, collapsed features, and thirst, but no cramps of the extremities, alteration of voice, or any leaden hue of the nose and lips. The pulse was 110 per minute, small, feeble, and stopped by the least pressure. She had not voided urine since twelve A. M. She was ordered to take five drops of the arsenical solution every half hour.

"Ten P. M.—Has neither vomited nor purged since taking the first dose of arsenic. Says that she felt the remedy at once effect her for the better. Has now and then slight twinging pains in the muscles of the abdomen; feels comfortable; skin becoming warm; pulse 96, larger. To take three drops of the arsenical solution every second hour.

Sept. 25th.—Nine A. M.: Has passed a comfortable night; bowels moved once; neither nausea nor sickness; skin hot; tongue moist, but coated with a white fur; thirst; passed two ounces of urine early in the morning; pulse natural in frequency, but somewhat fuller and stronger. To discontinue the arsenic, and to take a simple diaphoretic mixture.

26th.—Nine A. M.: Neither purging nor vomiting since last visit; feels quite well."

In the third case, was seen earlier, but before the medicine could be administered, vomiting, purging, and cramps came on. He took 20 drops of the arsenical solution every 30 minutes.

At nine A. M., the following morning, "found him sitting up, and down stairs. Took the arsenic until the middle of last night, and then discontinued it, as he felt well.—Nine P. M.: At six this evening the sickness, purging and cramps returned. He resumed the arsenic, and was relieved by the first dose. To continue regularly every third hour during the night.

"26th.—Nine A. M.: Has passed a comfortable night; neither purging, vomiting, nor cramps since last visit; no thirst; appetite improving; skin warm; pulse natural. To take two drops of the arsenical solution every fourth hour.

"27th.—Discontinued the arsenic last evening. Quite well.."

DR. LEON RENARD, in a note to the editor of the *Union Medicale*, describes the following method of extracting small substances which have become lodged in the groove formed by the reflection of the conjunctiva from the upper lid to the sclerotic, and which often cannot be seen, even when the lid is inverted. The lid being seized at its angles between the thumb and forefinger of each hand, is to be gently drawn forward as far as possible, over the lower lid and retained there for about a minute. On allowing the upper lid to return to its normal position, the flow of tears will carry off the foreign body, which will usually be found on the lower lid, or on the lashes, or on the cheek. The writer states that he has often found this simple method of the greatest utility and convenience.—*Amer. Med. Monthly*, from *Charleston Med. Jour.* Sept. 1859.

Creosote in Panaris.—It is stated by M. Turchetti, that as soon as the inhabitants of the province of Garfagnano perceive the first appearance of this painful affection, they apply to the finger a small piece of linen rag moistened in creosote. This is followed by intense pain which lasts nearly a quarter of an hour, after which the tumefaction and pain gradually subside, the course of the panaris having been cut short.

Gracious Heavens! Queen Victoria is again —— At her time of life, too!—*Boston Post.*

Editorial Department.

In accepting the proffered editorial management of the Louisville Medical Journal, we simply stipulated that it should not be the organ of any school, or party, or clique—of any man or of any set of men—but that it should stand, as it were, fairly and squarely in its own shoes, appealing to the whole profession, free to uphold the right wherever it might be found, and free to oppose the wrong wherever that might be found.

So, after an interval of eleven years, we find ourselves connected again with a journal of medicine.

Those whose memory goes back half a generation, will perhaps be able to recal or to recollect something of our quality. What we were formerly, we shall be now—with this difference, that, during the lapse of that half generation, having seen some of the dreams of youth and some of the hopes of manhood once and forever destroyed, we have become a soberer and perhaps a sadder man, and have also been made, we trust, in some respects at least, a wiser one.

To those whose memory does not go back so far, we will say merely, that we have no other end in view than the promotion of whatever we conceive to be for the interests and the welfare of the profession, and that, to this end, we are neither afraid to think, nor afraid to write what we think.

Finally, to all those who believe that the interests of medicine can be best subserved by independent journalism, we wish and will try to commend ourselves. As for those who think otherwise, we have no favors to ask of them, and none to give to them.

The Journal will not be, on the one hand, merely a review, or, on the other hand, merely a medium for the communication of original intelligence; it will partake of the character of each—sometimes the one predominating, sometimes the other—and, besides, will contain, culled from the whole field of the profession, whatever we may think of interest to the thoughtful practitioner, cultivated or uncultivated. We shall soon be in receipt of journals from abroad, and be thus enabled to make our own selections from foreign medical literature, British and Continental.

We hope to hear from the correspondents of a former day, and from another class of persons as well: there are times when every thinking man feels that he must say something; and from all of such, as well as from those who are in the habit of writing, we shall be glad of communications, be they reviews, or essays, or reports of practice. Nor do we intend to confine ourselves or our correspondents to what may be called the strict line of the profession—at least to that usually followed; there is a vast number of things, of high interest and of high utility, lying just outside of such line, yet all strictly professional in any comprehensive sense, and these from time to time will receive attention from us.

It is stated that in the thirty years prior to 1837, only thirty-seven persons died of small pox in Boston, and most of these were seamen and emigrants who died at Rainsford Island. In 1837, all laws relating to small pox were repealed, placing it on the same footing with any other disease, and in the succeeding twelve years 533 persons died from small pox in Boston alone, and the increase in other parts of the State was about the same proportion.

LAVATER and his work on Physiognomy have so long held a place among the celebrities of science, that it is almost startling to see, in the English literary papers, an advertisement from his daughter, Madame Lavater, at Zurich, offering for sale as "a memorial of her father," his silver mounted Medicine Chest and Instruments. That she should be so far reduced, is a scandal to the scientific world.

Death of Thomas De Quincey.—The recent intelligence from Europe brings us news of the death of this remarkable man, in his seventy-fifth year. De Quincey was before the public for half his lifetime as a writer and a man of letters, but it is only within the last ten years that his name has been made familiar to the generality of American readers. His writings, scattered profusely through the periodical literature of Great Britain for two-score years, and defying, in his own opinion, any attempt at reclamation, were first collected and published by Messrs. Ticknor & Fields, of Boston, who have just issued the last volume. These writings, amounting to twenty-two volumes, relate to a great variety of topics, and both in matter and in manner are unquestionably to be classed with the finest literature in the language. For *medical* readers, however, the chief interest centres in the "Confessions of an English Opium-Eater," and the sequel to it, entitled "Suspiria de Profundis," the former published in 1821—2, the latter in 1845. De Quincey, for ten or fifteen years of his life, (1804-17,) was a confirmed eater of opium, taking it in the form of laudanum—laudanum negus—to the extent of 8000 drops, or 320 grains, a day—an enormous quantity, certainly, though, according to Southey, it is only half that which the poet Coleridge was in the habit of using about the same time. De Quincey at length broke loose from this habit; and, in his "Confessions," he has told the story of his struggles—of the pleasures and pains of opium eating—in language that has no equal, that we know of, for richness, brilliancy, and sustained power, and for idiomatic grace, freshness, strength, and beauty.

It is understood that Sir John Forbes, the eminent physician and author, having lately suffered from severe illness, has intimated his intention of retiring from active life. He generously presented his very valuable medical library, numbering about 3,000 volumes, to the Marischal College, Aberdeen, were he received his early education. He graduated in medicine at Edinburg in 1817.

EXODUS OF SOUTHERN MEDICAL STUDENTS FROM PHILADELPHIA AND NEW YORK.—The Philadelphia correspondent of the *New York Times* writes as follows:

The students of the various medical colleges in this city assembled *en masse* in the Assembly Buildings, this morning, at 9 o'clock, and organized and passed a resolution extending an invitation to Drs. Luckett and Maguire to be present during the meeting and express their sentiments. A committee was appointed for that purpose. They retired, and in a few minutes returned, accompanied by the above-named gentlemen.

Dr. Luckett, being called upon, arose and made a few remarks, which he preceded by reading a number of telegraphic dispatches and letters he had in his possession. They are as follows: A telegraphic dispatch from Gov. Wise, stating that the citizens of Richmond would receive with open arms the students who had determined on leaving the colleges in this city to matriculate in their colleges. One, informing the students that they would be received at Richmond with military honors. Two dispatches, stating that two drafts of $500 each would be forwarded for the purpose of defraying incidental expenses. Also, letters from the faculties of the colleges in Virginia, North Carolina, and Georgia, setting forth that they would be welcomed to the colleges in a handsome manner.

A list of those who had determined on leaving the colleges in this city, to patronize the Southern institutions, was read; it contained three or four hundred names. A large number were added.

Dr. Maguire made a motion that they leave in a body to-morrow night, at 10 o'clock, in a special train, from the Baltimore Depot, which was agreed to. The same gentleman hoped that the students, on leaving the city, would conduct themselves as Southern men, in an orderly and quiet manner.

A committee was appointed to inform the Railroad Company of their determination. After which the meeting adjourned.

How the secessionists were received at Richmond, the *Richmond Whig* tells us:

The Southern students from the Philadelphia Colleges arrived here yesterday afternoon, by a special train on the

Richmond, Fredericksburg and Potomac Railroad. They were received by the faculty of the Richmond Medical College, the College Guard, Governor's Guard (cavalry), and an immense concourse of citizens. Notwithstanding the coldness of the weather, the ladies turned out in very large numbers, and manifested their approbation by waving their handkerchiefs, while the multitude cheered with the wildest enthusiasm. After leaving the cars, the students were escorted through the Capitol Square, and passing round the Washington Monument, uncovered their heads in token of respect to the Father of his Country. They then proceeded to the Governor's mansion, where they were welcomed in an able and patriotic speech by Gov. Wise. From the Governor's house they proceeded to the Medical College, where they were again welcomed by Dr. Gibson, of the College, in an admirable address. From the College they proceeded to the Columbia Hotel, where a magnificent supper awaited them. Along the route to the hotel they were greeted with the most enthusiastic shouts of cordial welcome and approval.

And here is what occurred in New York, according to the *Times* of that city:

The students from the Southern States, who are at present in attendance at our various medical colleges, assembled last evening in the rooms of the University Medical College, to deliberate on the action which they should take with reference to leaving this city and pursuing their studies in Southern institutions. There were between three and four hundred in attendance.

Mr. Taylor, a graduate of the University of Virginia, was elected president.

The first business in order was the presentation of a report from the committee on resolutions, which had been appointed at a previous secret meeting of the students. The majority of the committee submitted a report which expressed deep regret at the necessity which was forced upon the students, of severing their connection with the best institution on the continent. The belief was expressed that there were institutions at home nearly as good as this; and in the presnt state of feeling at the North, there seemed to be no alternative but to patronize Southern schools rather than Northern.

The minority report expressed the most decided contempt for the whole North. The late Union meeting, it said, had been arranged and carried out by merchants purely from selfish motives, and with others of a like character which had been held elsewhere, was of no value whatever as an exhibition of the true state of feeling in this part of the country.

The enunciation of these sentiments called forth emphatic contradiction from one gentleman, who had formerly resided in the South, but, amid cries of "put him out!" "put him out!" he was ejected from the room.

Still another series of resolutions was then read much more intense and indeed vituperative in expression.

Before the meeting adjourned a dispatch was received from those at the head of the New Orleans medical institutions, expressing regret that the Southern students in New York should feel obliged to take such action as that proposed, and stating further that they would be received there with open arms, and that their matriculation fees would be remitted. As the professor's fees, which are always paid in advance, are much the heaviest part of the expenses, and as nothing was said of remitting these, the response was regarded as not at all favorable to the adoption of the measures proposed.

Dr. Thomas finally made a motion to the effect that all who were willing to pledge themselves to leave for the South should take their stand upon the platform. After much confusion the motion was adopted, and fourteen stepped upon the rostrum and appealed earnestly to their companions to follow their example, but in vain.

We have two or three things to say of all this. In the first place, we are struck with the drab-colored decorum of the meeting in the Quaker City, and the Tammany-Hall turbulence that characterized that in Gotham. In the second place, these meetings were held in each city two or three days before Christmas—and the proximity of the latter is suspicious, to say the least of it. In the third place, and seriously, we have no sympathy with these seceders at all; their action is all wrong, and we protest against the whole of it. These young gentlemen went to Philadelphia and New York to study medicine, not to study politics, and they have yet to learn, it seems, that medicine is liberal and cosmopolitan, not narrow and sectional; that it has to do with the body physical, not the body politic, with the ills of the flesh and not the ills of the state; that, in short, it belongs to humanity, and therefore should be and is as wide and as large as humanity. Nor, granting that their action is right, do we see that they have gained anything beyond a temporary notoriety—at most, this: instead of hearing lectures in a northern college, perhaps containing two or three southern teachers, they hear lectures in a southern college perhaps containing two or three northern teachers—"this, and nothing more." If they are desirous of engaging in politics, we commend them to *medical politics*, assuring them that they will find the latter as full of artifice, of double-dealing, of treachery, of every thing that is ignoble and mean, as any other sort of politics in the world—and we will undertake to give instances, if necessary.

It is possible, indeed, that this *exodus* belongs there; for, it is intimated in certain quarters that southern colleges made overtures which led to the movements that we have chronicled. We can scarcely credit this. Common sense and common dignity, as well as that which is uncommon, alike oppose it. The comity—to say nothing of anything higher—that should exist among the medical colleges of the land, forbids any thing of the sort. We wish to see southern colleges built up, but we wish it to be done on legitimate grounds and by legitimate methods—and this is neither one nor the other.

Since the preceding was written, we have read Gov. Wise's speech, made to the students at Richmond. It is certainly an extraordinary production. Having been delivered a few hours before the Governor's term of office expired, it reminds us irresistibly of those grand pyrotechnic displays which mark the close of a performance. There are two good things in it, though: Gov. Wise is not going to be driven out of the Union; if he fights, he is going to fight in it—that is right. The other is contained in the subjoined extract:

Here in the midst of this metropolis is erected an institution of Virginia's own, on the very spot where God has grown the snakeroot to cure the ague and fever. [Laughter and applause.] Then we have a University, a Faculty, a hospital; and will you tell me Virginia's doctors cannot, at home, in Virginia, learn to cure her diseases as well as they can by spending millions in Philadelphia for learning there how to cure disease? I was frequently sick in Philadelphia, and have had the doctors there waiting upon me. On one of these occasions I had no less a man that the illustrious Virginian, Nathan Chapman, waiting on me. Mr. Chapman was a most eloquent orator, and as eloquent in colloquy, and I was too sick to relish his colloquy. On one occasion I got tired of his conversation, and I said to him, "Doctor, have you no patients to attend?" Says he, "Sir," in his nasal tone, "I have killed almost all and cured the rest," [Laughter.] Said I, "Sir have you no lectures to write? For God's sake leave me alone." Says he, "Sir, I wrote my lectures forty years ago, and I only have now to furbish them up with a few new anecdotes." [Laughter.] "Doctor," said I, "will that do in this enlightened age?" "Yes," said he, "it is good enough to make corn-crackers for Virginia." [Loud Laughter.] There is more philosophy in this anecdote than perhaps you may now likely give to it. Those high-pretending institutions, after they get their fame up, have more pretentions about them than there is of reality in them. The institution that is young; the institution that is rising; the institution that is to make a reputation is the one where, if you are earnest and zealous in your search after science, you will derive most benefit. The school that is unknown and unsung to fame—there is the place to get the real waters of the true Pierian Spring.

There is a philosophy here, and we commend its lesson to students and colleges, whether South or North.

The twelfth volume of the *Transactions of the American Medical Association*, which has just reached us, will not add much to the respect that may be entertained for the Association. It is a very remarkable volume, whether we consider its matter or its manner. Four hundred pages are occupied with "Observations on some of the Phenomena of Malarial Fever," and in these observations, the author, PROF. JONES, M. D., of the Georgia Medical College, discusses everything in the heavens, on the earth, and in the waters beneath the earth! Here is the first sentence of the first chapter:

> The object of this chapter is to sketch the mutual relations of celestial and terrestrial bodies and animated beings, and demonstrate—that the existence of man is absolutely dependent upon the relations of the component members of the universe—that a single alteration in the chain of phenomena would destroy the conditions necessary for the existence and manifestation of the phenomena of man—that the forces of man are all resultants of the forces of the sun and fixed stars, which keep up a never ending circulation and change of matter upon the surface of our globe—that man cannot create or annihilate force any more than he can create or annihilate matter—that the great law of the Indestructibility of Force, of Action, and Reaction, applies to all the phenomena of man—that man is a type of the universe, and comprehends within himself all phenomena, astronomical, physical, chemical, physiological, and psychological—that the knowledge of the structure, phenomena, and relations of man includes a knowledge of all science, whether relating to matter or mind.

And so he goes on for more than forty mortal pages writing sentences forty and fifty lines in length, and heaping quotation upon quotation until "the mount makes Ossa like a wart!" And what says the reader to this sentence from the "Report of the Committee on Publication?"

> The Committee feel that it is due to the Association, as well as to themselves, to state that the unusual delay in the appearance of the last volume of the *Transactions* was due to causes entirely external to themselves.

Now, we should like to see one of these causes. We have read of the Ego and the non-Ego, of the Self and the not-Self, of the metaphysicians—of their activity and, passivity, of the one's positing or determining the other; but *a cause external to itself*, is entirely beyond and above alike our reading and our comprehension. We shall notice the volume at some length in a future number.

LOUISVILLE

Medical Journal.

MARCH, 1860.

Original Communications.

Art. I.—*Three Cases of Funis Presentation treated successfully by the Posture Method.* By S. Brandeis, M. D., Louisville, Ky.

Case I.—Mrs Katharina Rehm, aged thirty, a native of Germany, and who has borne four children, (one of which was still-born in consequence of prolapse of the funis,) was seized with her fifth labor on the first day of July, 1858, at four o'clock, A. M. At five o'clock the membranes ruptured, followed by a full gush of liquor amnii, which carried forward with it a long loop of the funis and the right hand. The midwife in attendance, having discovered the mischief, sent immediately for my assistance. I reached the patient within ten minutes, and found the funis, feebly pulsating, outside of the genitals, the hand within, and the head balloting high above the entrance of the pelvis. Remembering a plan suggested by Dr. Thomas, of New York, I forthwith placed the parturient on her knees and elbows, supporting the body with pillows in such a way that the pelvis was a good deal higher than the chest.

With slow and careful manipulations I succeeded in replacing both funis and arm far beyond the head, while I kept my hand within the cavity of the womb in order to prevent a further prolapse. Strong labor pains set in, and, soon after, the head engaged so firmly in the superior entrance of the pelvis that all apprehension of a procedentia of the funis vanished. The patient was now placed on her back, labor proceeded rapidly, and three-quarters of an hour later a living child (a boy) was born.

The patient did very well afterwards. The placenta was spontaneously expelled, there was very little after-pain, and recovery took place rapidly. The child is now eighteen months old, vigorous and healthy.

CASE II.—Mrs. Katherine Rapp, aged thirty-six, a native of Germany, a stout and healthy woman, and the mother of four children, was taken with labor pains at eight o'clock, P. M., October 12th, 1859. Soon after the arrival of the midwife the membranes ruptured, and a loop of the funis and the hand presented. I was summoned to the case at 11 o'clock, P. M. On examination I found the midwife's diagnosis correct: the hand was the left one; the loop of the funis, still pulsating, was about three inches long; whilst the head was high above the entrance of the pelvis. The method described in Case I, was immediately carried into operation. The reposition of the parts prolapsed was accomplished in about ten minutes. Labor pains were rather slow for about three-quarters of an hour, and the patient, having been very much fatigued by her uncomfortable posture, was permitted to lie on the left side with a high pillow under the hips. The pulsation of the child's heart, which had been very feeble, now recovered its full strength, labor pains reappeared, the head engaged firmly in the pelvis, no further prolapsus occurred, and, at half-past twelve a loud crying child (a boy, eleven pounds in weight) made its appearance. Childbed proceeded without the least disturbance. The child is now four months old.

CASE III.—Mrs. Elizabeth Bohn, aged thirty-six, native of Germany, of vigorous frame, but somewhat reduced by a onchial catarrh which persisted during the later months of gestation, sent for a midwife at eleven P. M., February 3d, 1860. The pains were so slow and feeble that patient and midwife slept several hours during the night. At five o'clock A. M., contractions of the womb reappeared more forcibly, the membranes ruptured, after which the midwife discovered the funis projecting through the os uteri, but could not find any fœtal part presenting. My assistance was called for at seven o'clock A. M., February 4th, 1860.

On examination, I found the funis in from four to five small loops projecting through the os uteri, which was only partially dilated; the head, being high above the pelvis, I could discover only by introducing my full hand.

After placing the patient in the position already described, efforts were made to replace the funis, which was more difficult in this case than in the two former, as several loops were projecting, and one would drop down while another was carried up; but nevertheless the aim was accom plished in a very short time, and the operating hand kept within the uterus in order to prevent another prolapsus. In the meantime, uterine contractions propelled the head into the pelvis. The patient was now placed once more on her back, (to her great comfort), and auscultation soon convinced me of the child's life.

Labor proceeded rapidly, and at quarter-past eight A. M., one hour after my arrival, a crying child proclaimed to me once more the success of the operation.

The patient had some after-pains, which yielded to slight medication. She is now doing well.

A few remarks on the merits of the operation employed in the cases just reported, will be permitted.

The presentation or rather the prolapsus of the funis, is by all authorities in the art of accouchment considered as a complication most disastrous to the life of the fœtus, and the great variety of contrivances invented for the occurrence is the most eloquent testimony for the difficulty of its removal.

The space granted to this paper does not permit the reporter, nor is it his aim, to go into a detail of the various modes of treatment, but it may be remarked, that not only the life of the fœtus, but the life as well as health of the mother is often endangered or lost through the severe operations—forceps, version, and craniotomy—often resorted to, after repeated efforts have failed to replace the funis. The following table, collected from the highest authorities, shows the numerical proportion of this occurrence:

Collins,	16152 cases of labor.	97 funis presentation.	1 out of 165
Churchill,	90983 “ “ “	322 “ “	1 “ 282
Michaelis,	2400 “ “ “	27 “ “	1 “ 88
Boivin,	20357 “ “ “	38 “ “	1 “ 535
LaChapelle,	15652 “ “ “	41 “ “	1 “ 411
Hardy and McClintock,	6702 “ “ “	37 “ “	1 “ 181
Klein,	5490 “ “ “	55 “ “	1 “ 100
Barstch,	4425 “ “ “	16 “ “	1 “ 276
Arneth,	6608 “ “ “	33 “ “	1 “ 200
Skanzoni,	8415 “ “ “	29 “ “	1 “ 290

Out of 177,184 accouchments, which is the total amount of the figures just referred to, prolapsus of the funis occurred 695 times, giving a proportion of 1: 264, showing that this anomaly is one of the most frequent disturbances of labor.

Another table will show the relative mortality of children born under these circumstances:

	Prolapsus of Funis.	Children still-born.
Mauriceau,	39	15
De la Motte,	14	5
Clarke,	66	49
Collins,	97	24
Churchill,	322	220
Hardy and McClintock,	37	25
La Chapelle,	41	8
Michaelis,	27	20
Boivin,	38	18
Arneth,	33	11
Skanzoni,	29	13
	743	408

Thus, 743 cases of prolapsus funis gave 408 still-born children, a proportion of 1:1.82, which shows clearly enough that accoucheurs have not been very successful in treating this kind of labor.

The rationale of the posture method being obvious to every skillful practitioner, we shall, in conclusion, try to give the indications for it.

First: The operation is only admissible as long as circulation exists in the funis; even if the circulation is feeble, it may soon be restored after the impediment is removed.

Second: The os uteri must be sufficiently dilated or dilatable.

Third: The liquor amnii must be partly retained; otherwise, if it should all have escaped, and the uterus be firmly contracted over the child's body, every effort for the reduction of the prolapsed funis would be in vain.

ART. II.—*A Substitute for the Trephine, with Remarks on the Treatment of Injuries of the Skull.* By MIDDLETON GOLDSMITH, M. D., Professor of Surgery in the Kentucky School of Medicine, Louisville, Ky.

Every surgeon who has used the trephine much in the treatment of injuries of the skull, has often regretted the loss of so much sound bone as the use of that instrument involves in order to apply the elevator or to take away pieces of broken and detached bone. It is true, that by the use of Hey's saw, the object may be obtained in many instances without the sacrifice of much unbroken bone. But it is within the experience of every surgeon that he has often been obliged to sacrifice a quantity of sound bone greater than that for the removal or elevation of which the operation was undertaken.

In order to avoid this serious objection to the trephine, the writer has for the last ten years been in the habit of using a *chisel in place of the former instrument.* In employing the chisel the great object is the conservation of bone. The trephine must unavoidably take more than half its button from the unbroken calvarium. With a saw the surgeon must of necessity make his incision in a line that is nearly straight, and he cannot limit it in length. In order to prepare the calvarium for the application of any kind of saw, the periosteum has to be detached from a space much larger than that corresponding with the line or circle of the incision. Now it often happens that, when room has been acquired for grasping the fragment with forceps, the fragment cannot be extracted because it is held by a single or by several angles, or by a narrow projecting edge of the external table. With a chisel, impelled by the hand or a small hammer, just so much bone may be removed as is necessary for the insertion of the elevator, or for the extraction of the detached pieces, and no more. The dura mater is not endangered in the operation, for the depressed bone protects it. It is never necessary to cut any part of the internal table, for if the opening in the external table is as large as the fracture of the internal table, then the external opening is large enough to allow the required extraction.

If the reader will fracture, with the face of a hammer, the skull of any of the larger inferior animals, and with a half-inch carpenter's chisel undertake to make room for elevating bone and removing fragments, the many advantages of the instrument will at once be apparent to him, and that, too, in a manner more forcible and satisfactory than any account which the writer can give. The operation does not admit of a formal description, for the variations in size, shape, degree of depression, and difference between the fracture of the internal and that of the external table, are so great that no description can be given except in a given case, and then the formula would be appropriate to that case alone.

The writer has not used the trephine in fractures of the calvarium for the last ten years. He has always been able to effect the objects of the operation with the chisel as the sole cutting instrument applied to the bone. He has had occasion to use it in many instances, in private and hospital practice, and so manifest are the advantages derived from it as compared with the trephine, that he believes it has very generally been adopted by his pupils and professional acquaintances, and he feels firmly convinced that any surgeon who will once try it will afterwards adopt it.

The mere loss of bone, every surgeon will admit, is, of itself, a very serious evil when recovery from the immediate effects of the operation has occurred. But this is not all: The trephine cannot be applied to the complete division of the bone without injury to the dura mater, and that, too, to an extent not commonly recognised by operators. The membrane is scratched more or less by the teeth of the saw, and although in skillful hands the abrasion is not deep, nevertheless the injury done participates with other things in exciting that which is always to be dreaded—inflammation of the meninges.

The edge of the button hole often necroses, ("It is rare that exfoliation does not take place from the edges of the cut bone, or from the circle made by the trephine." Guthrie, *On Injuries of the Head*, p. 96, 97,) and thus the presence of the sequestrum keeps up constant irritation and discharge, and maintains that open state of the parts which renders them liable to inflammation. The division of the bone by a sharp cutting instrument, like the chisel, inflicts no other injury on the bone. Necrosis is not so apt to follow, the parts heal quickly, and thus the important and sensitive organs beneath are not so long exposed to the contact and the influence of the air.

In the next place, the writer has uniformly practiced the immediate and perfect closure of the wound in the scalp.

It is hardly necessary at the present day to enter into any detailed array of cases to show that a greater degree of mortality attends upon compound fracture, that is, fracture of the skull with wound of the scalp, than upon fracture without such wound. The belief that such is the case finds expression in the practical precepts of almost every surgical anthority, if, indeed, it is not stated in round terms. GUTHRIE says:

> A simple fissure or fracture of the skull is of no more importance than a fracture of any other bone in the body, unless it implicates the brain, and should be managed according to the same principles of surgery. * * * Mr. Abernethy was the first to declare in this country, that a simple fracture of the skull should always be left to the efforts of nature, unless urgent symptoms were present requiring relief. Sir A. Cooper was the first to insist, in modern times, that if the scalp or integuments of the head were undivided down to the bone, they should not be interfered with; and that although a fracture might be suspected, its existence should not be ascertained, unless symptoms rendered it necessary.
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> Velpeau (Velpeau, A. M. L., *De l'Operation du Trepan dans les Plaies de Tete.* Paris, 1834,) has published on this point some observations made by F. Martel, of Lyons, in 1601, which deserve to be recorded, as they show that the light of truth did break in on our predecessors when it might not have been expected. Martel says: "A wound in the integuments ought not to be made to expose the bone on the suspicion of its being fractured; for I say, that a simple fracture of the head may be cured without its being seen, and the less wounds of the head are exposed to the air the better. I repeat, that a simple fissure, without a wound in the integuments, gets well by the aid of nature alone, and that if the bone does not press on the dura mater there is no use in exposing it; and when the bone is deprived of its integuments the sooner it is covered over the better." He recommends for dressing only water or oil.
>
> If the integuments or scalp should be divided, and bone fissured, the same principle should be carried out, by en-

deavoring to procure the union of the divided parts, as was done during the war in all such injuries from sabre cuts as did not penetrate the skull,—a practice that was found to be eminently successful even when union did not take place.—*Guthrie on Injuries of the Head*, p. 52, 58.

Sir Astley Cooper has stated, in his Lectures on Surgery, that there is a great difference as to the danger of inflammation and suppuration of the membranes of the brain between those cases in which the fracture and depression is complicated with a wound of the scalp, and those in which the soft parts are uninjured; such mischief being much more liable to occur in cases of the first kind than in those of the second; and on these grounds he recommends that, where the complication exists, *we should not hesitate to apply the trephine;* and on the other hand that, where it does not exist, we should carefully abstain from adding to the injury, by dividing the scalp and exposing the fracture. * * —*Medico-Chirurgical Review*, p. 115.

The conversion of a simple fracture into a compound one, and the removal of any portion of the cranium, are serious proceedings. * * *—*Ibid*, p. 348.

MILLER (*Practice of Surgery*, p. 61,) holds to the propriety of non-interference in fracture without symptoms of compression.

SOUTH, SIR A. COOPER, ABERNETHY, and DRASI, (CHELIUS, *System of Surgery*, p. 432, note,) clearly avow the opinion that in fracture without scalp-wound no incision should be practiced, unless the symptoms of compression are urgent. This opinion is founded on the idea that the open state of the fracture, *i. e.*, the exposure of the broken bone and the dura mater to the air, renders them liable to inflammation. Indeed, the practical precept which they inculcate is nothing more than the vicarious expression, as it were, of this truth. It cannot be construed in any other way. It cannot be held that the incision of the scalp, *per se*, contributes to the causation of inflammation; this is controverted by every days' experience. Nor, can it be held that the removal or elevation of the bone inflicts any serious injury; it, rather, by the removal of pressure, abstracts one of the causes of inflammation. The man from whose skull a piece of depressed bone has been removed by an operation, is *minus* one cause of inflammation, the depressed bone—and *plus* one, the scalp wound. If the latter were not the more efficient cause, the practical precept would be absurd.

No one has more clearly pointed out and proven the agency of the air in the production of inflammation than Mr. Paget, in his lectures on Surgical Pathology. It is the vital principle of subcutaneous surgery; most modern surgeons recognise it in their directions for the closure of ordinary wounds; and it seems strange that the practical precept growing out of it has not as yet been so clearly pronounced in injuries of the head—a class of injuries in which this agent produces more disastrous results than it does in any other.

It is true, we are told to close the wound in the scalp with adhesive plaster; but every surgeon who has had occasion to trephine much, knows that the wounded structures cannot be brought together and kept in apposition by adhesive plaster, above all when the crucial incision has been practiced. A well-founded prejudice exists against the ordinary thread suture. It is seldom used. Hence, in the great majority of cases, if not, indeed, in all, the wound is not closed in the sense in which wounds are closed in order to produce immediate union of the parts.

Close approximation, if not always immediate union, can be procured by the use of metallic sutures. The writer used formerly suture pins, but has latterly employed the silver or iron wire. The sutures are to be placed so near each other as to secure as close contact between the parts as is secured in the operation for vesico-vaginal fistula. It may not always be best, as in those cases where blood continues to ooze from the divided bone and soft parts, to include the whole extent of the wound, but the major part of it should always be closed at once.

The shape of the wound materially influences the ease of coaptation. The crucial wound is the most difficult of all to close; for, besides its shape, the angles of the flaps overhang the breach in the skull, and for lack of support on their inner surface fall asunder. Hence, it is always better to make the external wound of such a shape that the perfect closure of it will be as easy as possible. The surgeon often finds the scalp injured in such a manner that all he can do is to extend the wound; but, then, the incision should have no angles over the breach of the bone. If a cut is required at an angle to the line of the wound, the angle should commence at the extremity, not the middle of that line. A single flap will thus almost always suffice.

When there is no scalp wound, or when the latter is small, then the surgeon should make a semi-circular flap large enough to embrace the breach of bone, and to extend from one-half to three-quarters of an inch beyond it. The edge of the incision will thus have a substantial support, and will not come apart by falling into the depression of the breach. The writer is disposed to place great stress upon this point in the management of these cases. It is true that he has not yet seen that number of cases which, if related, would be enough to establish a general rule to the satisfaction of others; but still he has seen enough to satisfy him that the safety of the patient is vested more in the exclusion of the atmosphere from contact with the dura mater than in any other thing and in any other circumstance in the whole operation of trephining. In confirmation of this, he would state that since he adopted this practice he has never lost a patient whom he has trephined before inflammation occurred, and in whom the brain or dura mater was not torn. He cannot now recall all of the cases in which he has had occasion to operate in the last ten years of his practice; but he feels confident that in that period he has operated at least twenty times in the kind of cases specified. He does not mean to be understood as stating that perfect closure of the wound gives immunity from inflammation, but that, so far, he has lost by inflammation no patient thus treated, and that his experience most decidedly establishes in his mind the importance of the measure.

The writer's colleague, DR. HARDIN, Professor of Obstetrics in the Kentucky School of Medicine, has operated in some seven or eight cases, including those which he reported in the *Western Journal of Medicine* for 1851 or 1852. In all of the cases he says that, according to Velpeau's direction, he so managed the incision into the scalp that the line of the scalp wound should not overlie that of the fracture, and he did this chiefly by adopting the semicircular incision. He also practiced the immediate closure of the wound in all of these cases, and he reports that he has not lost a single case. Something of this success is doubtless attributable, in his practice as in that of the writer, to the fact that most of the cases were in rural districts. But this also is noticeable, that the two parties, acting without concert, and in distant parts of the Union when most of their operations were performed, should have been led, the one by one train of reasoning, and the other by another, to a practice substantially alike in purpose and closely accordant in results. These results the writer fears are too good to last; for it were absurd to hope that any modification of the operation, or subsequent treatment, can strip the injury entirely of its danger

Another and important point to be attended to is the preservation of the pericranium, and this to the end that new bone may be produced. Not only is the pericranium to be preserved, but it should be preserved in connection with the scalp as far as possible. If the wound in the scalp reaches to the pericranium, the line of that wound should be the place where the detachment should be begun, either for the application of the chisel or for the removal of loose pieces. The pieces should be pressed upon and otherwise examined, in order to determine the necessity of removal, and if they are loose and require removal, then the pericranium should be dissected carefully from them—not scraped off—*and raised with the scalp.* This advice is based upon the fact that in the adult the pericranium participates more largely in the production of bone than the dura mater. The latter, as shown in Rodier's recent experiments, takes but little part in the regeneration of bone, and, on theoretical grounds, if we are to look hopefully for the restoration of lost bone, we are to look for it through the agency of the pericranium chiefly. That large pieces of the calvarium may be reproduced, is shown by the occasional results of sabre slices of different portions of the vertex. Fractures and depressed pieces of bone might much oftener be saved were it not the fact that the external table in the fragment is often detached more or less from the internal table. The inner table thus separated from the outer, and detached also from the dura mater, as it almost always is, by the injuring force—or its connection with the dura mater being feeble at best, and affording little circulation—will probably necrose if allowed to remain. But the removal of the inner table of course involves the removal of the outer, so that fragments of the latter, which might be saved but for this circumstance, have to be sacrificed. These considerations have to do with the question of removal or elevation.

In the young subject, in which the dura mater is proverbial for the strength of its attachment to the inner table and for the freedom of its vascular connexion therewith, the inner table is not detached in fracture of the calvarium. Hence, in young subjects we almost universally elevate. Elevation does not require, nor do we practice, the removal of the pericranium, or even the scalp over the whole of the fractured portion; and, hence, among other things, the comparative innocuousness of such injuries in the young.

These several facts, as well as the observation of the results of injuries requiring operations, have led the writer by degrees to remove more of the fractured pieces of the inner table in the adult, until now he makes it his general rule to extract from under the shelving edge of the external table all such pieces of the inner as can be detached with the forceps, and to restrict the act of elevation to fragments of the external table alone.

Since the publication of Rodier's experiments in this country, in the early part of 1859, the writer has had occasion to trephine in three instances. In the first, occuring in March, 1859, some fragments of the temporal and parietal bones, just above and behind the ear, were removed from the head of a negro boy. The breach was about the size of silver dollar. The periosteum of the fragments was carefully raised in the flaps. The cutting part of the operation on the bone was made with the chisel; the irregularly shaped flaps were closed throughout with silver sutures thickly inserted, and the line of the scalp wound was covered with scraped lint and a moderate compress. The flaps adhered throughout their whole extent by the "first intention." The scraped lint was not detached for ten days. There was not a single symptom of injury during the whole time the boy was under observation—and on examining him to-day, Feb. 4th, 1860, the whole breach of the bone has been filled with new bone.

In the second case, that of a negro man, from whom large portions of the temporal and parietal bones were removed in October last, in all leaving a breach as large as the palm of the hand, a considerable portion of bone has been reproduced. The writer has not seen the patient, but this is the report which has been made to him. In this case it was not possible to close the wound completely, on account of the blood which continued to ooze from it; and, to provide for this, a small opening was left at the inferior portion of the wounded scalp, but below the line of fracture.

The third and last case, was that of a young man operated on in the presence of the class in the Louisville Hospital. He had been struck with the edge of a shovel upon the median line of the forehead. A linear depressed and comminuted fracture resulted. In this case a considerable piece of the os frontis was extracted, the way for its escape having been prepared by the chisel, and a part of the depressed bone was elevated. The longitudinal sinus was opened by the injury, and the oozing of blood from this rendered it impracticable to close the wound in all its extent. He left the hospital at the end of three weeks, or thereabouts, but since his return to the city, I learn from his medical attendant, Dr. Forsyth, that some small pieces of broken bone have been discharged, and the case is therefore still under treatment.

In conclusion, the writer would be glad if any of his former pupils, or his medical friends who have heard his lectures on the foregoing topics, or who have had occasion to see him make the operation according to the precepts here laid down, would, on seeing this paper, communicate to this Journal their own experience in the matter.

ART. III.—*Occlusion of the Os Uteri during Labor.* By J. C. METCALFE, M. D., of Louisville, Ky.

[This paper was originally prepared for the College of Physicians and Surgeons of this city.]

I desire to lay before the Society the history of some obstetrical cases, in which there was entire obliteration or closure of the os uteri. Judging from the sparse number reported by obstetric writers, I think that such cases are seldom met with in ordinary practice.

The first case is that of Mrs. M., aged thirty, native of

Ireland, rather short, otherwise well formed and healthy.

On the 18th of March, 1857, I was requested by my brother, DR. C. K. METCALFE, to visit with him Mrs. M., who had been complaining several days of irregular pains, resembling false labor. Her general condition was good, and when asked if she had arrived at her full time, she replied that she was nearly three weeks over her reckoning; that she ceased to menstruate on the 1st of June, 1856, and quickened the last of October following; that four days previous to my visit the liquor amnii commenced passing off without any previous pain, and had continued up to that time, at intervals mixed with matter which, in the language of the nurse, resembled the fecal discharges of a child three weeks old.

Upon making an examination per vaginam I was unable to find any os uteri, or anything that felt like it, though I carefully explored the whole inferior segment of the uterus—still it was evident that there was an opening communicating with the vagina, through which the liquor amnii had escaped. At a point corresponding to the left acetabulum there was a rugous feeling communicated to the touch, as if the uterus and vagina were irregularly attached; and the finger firmly pressed on this point caused considerable pain—which was not the case elsewhere. The head of the fœtus could be distinctly felt through the walls of the uterus.

Her previous history is as follows: About two years ago she was confined with her first child, while residing in New Orleans. The labor was very tedious, being a breech presentation, and the head of the child remaining in the pelvis from seven o'clock in the evening until five o'clock the following morning, when it was extracted by inserting a cotton hook into the mouth of the child and making traction by the feet and hook, at the same time directing the husband to make pressure with both hands applied over the hypogastrium. She was confined to bed for about six weeks, during which time she suffered but little pain. The lochial discharge was very offensive and profuse, lasting four or five weeks, and producing great prostration. The menses returned in about six months, and remained regular up to the time of conception.

As there was nothing in the case demanding immediate action, we deemed it prudent to wait until there was some more decided effort of the uterus to expel the ovum, and also to allow ample time for development of the os, should there be any present. This we confidently hoped for during the next twenty-four hours.

I was again summoned to see her the following evening. Her general condition was good; she had rested tolerably well during the night, having been disturbed by occasional pain. She stated that she had had several hard bearing down pains in the last half hour, and that she thought she would soon be through.

I again made an examination of the uterus, but found no change in the condition of the parts. In order to ascertain the actual condition of the latter, I had the patient placed before a strong light, and introduced a four-bladed speculum uteri. After cleansing the parts I discovered among the rugæ which were felt by the finger a small ulcer, not so large as a three cent piece, of an ashy color, and which bled slightly when the sponge was applied. Examining it with a probe, the latter passed readily into the cavity of the uterus, and was immediately followed by a discharge of matter resembling the contents of the small intestine—in fact, my first impression was that I had passed the probe into the bowel. Upon examining this matter I found it to be inodorous, mixed with what I conceived to be healthy pus, together with the liquor amnii. This was the only opening detected in the inferior segment of the uterus, (and certainly this did not bear any resemblance to the natural os uteri,) all other parts presenting a smooth and regular surface.

An artificial opening was made at the most dependant point, by first making a crucial puncture with a scalpel, through which a probe-pointed straight bistoury was introduced and carried directly backwards, making an incision three-quarters of an inch in length, then directly forwards, the same distance, making an opening sufficient to admit two fingers; very little blood was lost from these incisions. I ordered the patient to be replaced in bed, hoping that active labor would come on as soon as she recovered from the shock, and directing her husband to call me when active labor began. He called at my house the following morning and stated that she had had slight pains during the night, but was becoming very weak. I requested him to see PROF. HENRY MILLER, and ask him to see the case with us.

DR. MILLER met us at nine o'clock, A. M. After making a careful examination of the case, he suggested that we make two lateral incisions of the same length as the longitudinal—which he did with the same bistoury, directed by the finger of the left hand. The hemorrhage was so profuse from these last incisions as to demand the immediate use of the tampon. A sponge was first firmly applied to the incised parts, but, proving insufficient to arrest the bleeding, it was withdrawn, and the vagina tightly packed with raw cotton, confined by a T bandage. A broad roller was applied around the abdomen to prevent its expansion and to excite uterine contraction. Ordered the local use of ice, and one drachm of tincture of ergot every twenty minutes until active labor pains were produced.

This treatment was continued for two and a half hours, when there were decided manifestations of approaching syncope, although there was but little blood escaping. The tampon was removed, followed by the escape of a large quantity of coagula, the bleeding seeming to be as active as ever. Two ounces of the ordinary tincture of iodine was thrown up with the stomach pump, which arrested the hemorrhage immediately. Brandy and other stimuli were freely given from the time that profuse hemorrhage set in, still she continued to sink, and died in about seven hours after the last incisions were made. The ergot was continued until a short time previous to death without any perceptible effect.

Autopsy. On laying open the uterus, the inferior half of the organ was found to be filled with coagula of blood surrounding the child, which being removed, the placenta was found to be perfectly attached to the fundus uteri. The pelvis was well formed and of ordinary capacity. On passing the hand through the incised parts from above downwards, they were found to be nearly as thick as the body of the uterus. On the inner surface, corresponding to the rugæ on the vagina, was a firm ridge resembling a cicatrice. I was unable to carry my examinations further, as the husband would not permit the removal of the organ.

The next case is that of Mrs. J., aged forty-two, a native of Kentucky, a little below the medium size, well formed, of healthy parentage, and who has enjoyed tolerable health to within the last three years. She is the mother of eight living children, and has had two abortions within the last three years.

In the spring of 1856, shortly after her eighth accouchment, she began to suffer from uterine disease, for which she was treated by her family physician. After remaining under his care for some time without receiving any permanent benefit, she was induced to place herself under the care of Dr. Rossi, of Bardstown, who enjoyed some reputation in that place in the treatment of uterine disease. I am not able to say what kind of treatment she was subjected to, more than that the speculum uteri was used, and a caustic solution of some kind applied to the uterus, and that about half an hour was required for each application. Under this treatment she became much better, and was able to return home in about three months. Shortly after her return she was attacked with uterine hemorrhage. Her physician, mistaking the true nature of the case, treated her for menorrhagia. After treating her for some six or eight days, the bleeding still continuing, he made an examination per vaginam, and found protruding through the os, a part of the bones of a decomposed ovum, which he removed—the remainder he removed at two or three different times, the patient being too much exhausted to bear their removal at once. The system having become poisoned by the absorption of the pent up putrid matter, she lay for several weeks in a most critical condition. The uterine discharge during this time was profuse, and so offensive that those only who were habituated to it could remain in the room. She was able to sit up and walk about the room in about nine weeks, but was not entirely free from utering suffering, and was troubled a good deal with leucorrhœa.

Menstruation came on in about eight months, and she again became pregnant in the spring of 1858. She suffered considerably from pain in the back and soreness of the lower part of the abdomen, and was seldom able to leave her room.

I was summoned to see her, for the first time, September 3d, 1858. I found her laboring under subacute inflammation of the uterus, with fever of an intermittent type, coming on at regular intervals, preceded by slight chill. There was considerable pain and tenderness of the inferior half of the abdomen, especially over the uterus, which extended a little above the umbilicus. She stated that she was about six months advanced in pregnancy, and that she could not bear the weight of anything over the bowels.

Ordered: opium, with small portion of ipecac; an emollient poultice to the abdomen; quinine to be given during the intermission of the fever.

Four A. M. Found her free from fever, but no change otherwise, only that she complained of occasional pain in the uterus, resembling labor pains, and expressed herself as feeling like she would miscarry. Treatment continued Enjoined perfect rest and quietude.

At my evening visit there was a slight exacerbation of fever, and she said that she was sure that she would abort —that the pain was like that of labor, and that she felt just as she did when she aborted before. I made an examination per vaginam but was not able to find the os uteri. The dose of the opium was increased so as produce a state of semi-narcotism.

Five P. M. Evident increase of pain and abdominal tenderness; is stupified from opium, but has had no refreshing sleep during the night; expresses herself as feeling worse. Made an examination per vaginam but could not detect the os uteri.

Ordered: one-half grain of Sabine's extract of opium to be given every two hours until rest was procured.

I made known to the husband the condition of his wife and requested him to see PROF. HENRY MILLER, and get his assistance.

6th. Visited the patient at nine o'clock A. M., with DR. MILLER. Found her general condition about the same; had rested some from the opium. Made an examination with the speculum uteri, but could find no os. About half an inch to the right of the axis of the pelvis, there was a transverse depression in the uterus about three-eighths of an inch long; immediately below this there was a slight oblong protuberance, resembling somewhat the inferior lip of the os uteri. The uterine probe was passed over this depressed surface, but no opening could be found. We deemed it prudent to wait, and the treatment was continued.

Evening visit. Patient about the same; some increase of labor pain. Could not detect any change in the state of the uterus.

Seven o'clock, A. M. Consultation. Pains at longer intervals, but regular, and have more force. Thought that there was an appreciable increase in size with attenuation of the depressed point—otherwise no change.

Treatment: Nutritious diet to sustain the patient; no medication.

Evening visit: Pains gradually increasing in frequency and force. I would here remark that, though the patient seemed to suffer a good deal from the pains, yet they were not of the expulsive character. I thought I could feel a small opening in the depression, but there was no change of it during pain.

8th. Nine A. M. The system was evdiently sinking under the long continued pressure of the disease. It was very evident that there was a small opening at the depressed point, surrounded by indurated margins; DR. MILLER enlarged this opening as in the former case by making a transverse incision, embracing the depressed surface and extending a little beyond on the right side; thus enlarged, it readily admitted the end of the finger, and through it the head of the fœtus could be felt. There was not more than a drachm of blood lost by the operation. The patient was ordered to take as much nourishment as the stomach would tolerate, with an ccasional stimulus.

Evening visit. General condition the same. Some dilatation of the opening.

9th. Nine o'clock A. M. Consultation. Patient restless, has an anxious appearance; has had little or no sleep; skin rather hot, pulse quick and feeble; expresses herself as feeling very much prostrated. Pain of a more expulsive character, but not more frequent. The opening has dilated sufficiently to admit the ends of two fingers. The head of the fœtus is pressed firmly against and is partially engaged in the opening during pain. A very fetid sanguineo-purulent discharge was escaping from the uterus. DR. MILLER suggested, in order to remove this offensive matter, that the uterus be washed out with tepid water, and that a stream of warm water be made to play on the os uteri for some time by means of the stomach pump, so as to relax it, as well as to increase the force of the pain. This produced vertigo, nausea, and a sensation as if she was being inflated like a balloon. She sank into a half unconscious state, from which she was aroused by the coming on of a more powerful pain than she had had before. The pains having again become weak and insufficient, I repeated the uterine douche in an hour and a half, but without producing pains sufficiently powerful to expel the fœtus.

Stimulus was freely given; still she continued to sink, and it was evident that she would soon succumb unless speedily delivered. Under these circumstances I determined to make an effort to extract the fœtus through the opening, which was dilated to one and a half inches in diameter. For this purpose I used a small pair of calculus forceps, which I introduced into the uterus, directed by the finger of the left hand, and seized the head of the child and extracted it. The placenta was thrown off with but little loss of blood. Exhaustion had come on with the delivery; no pulse at the wrist; cold extremities; and for two hours reaction seemed doubtful. By the free exhibition of stimuli, and the application of mustard sinapisms, with heat to the extremities, reaction was fully established in about ten hours. She made a very good recovery, and was able to go about her room in four weeks. Menstruation was reestablished four months afterwards.

For the following cases I am indebted to the kindness of PROF. HENRY MILLER. They will be found equally interesting and instructive. He says:

"In compliance with your request I will give you as many of the particulars of the two cases of occlusion of os uteri during labor as I remember.

"The first case occurred in rather a delicate lady, the mother of several children, who had ceased to bear children in consequence, it may be supposed, of uterine disease. I treated her for chronic cervical inflammation with induration, and I remember that I applied the potassa cum calce at least once. She became pregnant subsequently to treatment, and when she fell in labor another physician was called to attend her. She had been in strong labor several hours when I was requested to visit her; it being ascertained that there was no mouth to the womb. Failing to find an os by the usual tactile examination, or even to feel where it had been, I dilated the vagina as fully as possible with the four bladed speculum uteri, when it was easy to see a whitish line, perhaps an inch long, running transversely across the most dependent part of the cervix—evidently the cicatrice formed by the union of the labia uteri. I pushed a narrow bladded bistoury through the tissues and membranes at one extremity of the white line, and divided it in its whole length. A quantity of liquor amnii gushed out, and on withdrawing the speculum I found that there was an opening about equal to that commonly found a few hours after labor has set in. Believing that the uterine contractions would gradually enlarge it, I left the patient in the care of the attendant, and learned that she was naturally delivered in the course of a few hours.

The second case was that of a German woman of sanguineous temperament and inflammatory diathesis. She had been treated by DR. GROSS for inflammation of the os uteri. What remedies were used by the latter gentleman I am not informed, but from my knowledge of his practice I presume he used no other topical application but nitrate of silver, and probably the acid nitrate of mercury.

When she was in labor the occlusion was discovered by DR. BRANDEIS, who was in attendance, and I was called in consultation.

On exposing the parts with the speculum, the same appearances were presented as in the first case, only there was a very minute opening, through which the liquor amnii had escaped. The same treatment was resorted to with a similar result. I subsequently treated her for the same malady, inflammation of the os uteri. She has not since conceived."

In calling the attention of the Society to some of the most important points in these cases, I do so with the hope that their discussion may lead to a better understanding of the causes most likely to produce such formidable mechanical obstruction to the progress of labor, requiring for their removal the use of the knife, the bare mention ing of which causes the greatest alarm and distrust in the parturient female.

I think there can be but little doubt that the cause which led to obliteration of the os in the first case, was injury received during the first accouchment. When we remember that the head remained impacted in the pelvis for twelve hours, and the unusual means used in extracting it, the only wonder is that greater injury was not done. The train of symptoms which followed, both local and constitutional, as well as the condition of the parts at the time I examined them, are but so many evidences of sloughing, and that to a considerable extent. And the hemorrhage, which was so speedily and unexpectedly followed by death, was most probably owing to the incisions having been made into the inferior segment of the uterus, the cervix having been destroyed by the previous sloughing. This is the only case I have been able to find in which death ensued from hemorrhage from the incisions made, though many cases similar to it are reported, in some of which it was clearly ascertained that there was congenital absence of the cervix. In fact, in all cases where any allusion is made to the loss of blood, it is stated as being little, generally amounting to only a few drachms.

The profuse and exceedingly offensive lochial discharge, the great prostration following it, the tardy recovery and subsequent local suffering, along with the appearance of the parts at the time the examination was made, with the entire absence of anything resembling the superior lip of the os uteri, are all so many evidences that there was sloughing in the second case, though not to so great an extent.

A remarkable feature in the second is that the left side of the artificial os dilated while the other remained fixed and rigid. This I think was owing either to a morbid interstitial deposit, or to the presence of a cicatrice.

I think the most rational supposition, or what seems to me to be the most plausible, in regard to the closure of the uterine orifice, is that it was effected by the process of granulation, receiving a new impulse at the time of conception.

In the two cases of occlusion reported by PROF. HENRY MILLER, both had been treated for chronic inflammation of cervix and os uteri, and in one the potassa cum calce, and probably in the other some caustic application had been made. Now, whether these topical applications had any agency in producing the agglutination of the os, is difficult to determine; yet I am inclined to think that such application favored at least the union by changing the character of the local inflammation, which was further aided by the coincident occurrence of conception and the important changes which follow it.

Reviews.

ART. IV.—*Luxations of the Hip and Shoulder Joints and the Agents which oppose their Reduction.* By MOSES GUNN, M. D., Professor of Surgery in the University of Michigan. Detroit: Barnes, French & Way, 1859.

The pamphlet of DR. GUNN, written, he tells us, exclusively for his pupils in the University of Michigan, contains his views in regard to the real obstacles to reduction in dislocations of the hip and shoulder, and the way of avoiding them. He holds that the untorn portion of the capsular ligament is the chief obstacle to the return of the head of the femur into the acetabulum; and in order to establish the truth of this proposition, he relates several experiments made on the cadaver. In our judgment, the conclusion to which DR. GUNN comes, is substantially correct. DR. FENNER, (*New Orleans Medical and Surgical Journal*, for July, 1848, quoted in the *New York Journal of Medicine*, for September, 1848,) giving an account of the appearances on dissection in a case of dislocation of the hip, admitted into the Charity Hospital, New Orleans, says:

> The head of the femur, in being forced upward and outward, had ruptured and lacerated a portion of the obturator externus, pyriformis, and gemini muscles. After all the external muscles about the joint had been dissected up, the thigh could not be brought down; the iliacus and psoas magnus were then severed, these allowed to descend a little, but the head could not be replaced. The triceps abductor was then divided without effect. The ilio-femoral ligament was found tensely stretched; all the muscles between the pelvis and the thigh were then severed; no obstacle to the complete extension of the limb now existed, "*yet it was found impossible to place the head of the femur in its proper position. It could not be forced back through the aperature of the capsular ligament out of which it had passed.*" To one half of its extent the capsular ligament was ruptured, and the opening "*had to be enlarged from one half to three quarters of an inch before the head of the femur could be put back into the cotyloid cavity:*" here lay the chief obstacle to the reduction of the dislocation.

Thus, while DR. FENNER clearly discerns that the unbroken capsule was the obstacle to the return of the head of the femur in the case related, he does not distinguish, as DR. GUNN has done, the precise agency of this obstacle. The views of the latter gentleman on this point are embraced in this paragraph:

> A fresh, whole, and muscular subject was selected, and a circular incision was made around the middle of the

thigh and down to the bone; another, from the tuberosity of the ischium, around the inner aspect of the thigh and over the dorsum of the ilium to the point of commencement, and all the tissues were cleanly removed from the bone and capsule of the joint. The upper and posterior half of the capsule was then cut away, leaving the anterior and inferior half whole, and the round ligament was divided. In this state it will be seen that *all tissues* were entirely out of the way (and could neither afford protection against dislocation, or impediment to reduction), except the anterior and inferior half of the capsular ligament. I now place the limb in the position which characterizes the dislocation upon the dorsum, viz., the knee in advance of the other, and the foot inverted; and the pelvis being fixed, I attempted to produce dislocation, but failed to do so; and I believe that no force, however great, applied to the knee, would be sufficient to accomplish the escape of the head of the bone without fracture of acetabular walls so long as the limb remains in this direction; for in this position, the head presses *perpendicularly* against the superior posterior portions of the acetabular walls. But on carrying the limb to a position in which the thigh crossed that of the opposite side, at a point just above its middle, slight pressure was sufficient to dislocate the bone; for the acetabular walls, in this position, presented to the head of the bone an inclined plane, while from same reason of positon, the undivided portion of the capsule was relaxed, thus permitting the head to slide easily up this inclined plane and ride over the acetabular edge. At the moment, however, during which the head rested upon the edge of the cavity, this undivided portion of the capsule became tense, relaxed again as the head settled down upon the outside of the cavity, and dropping the limb down to the position which characterizes this dislocatcon, it became again tense. Efforts at reductiin by extension and counter-extension in this direction were now made, but were unsuccessful, for this tense, undivided portion of the capsule bound down the head so that it could not ride back over the edge of the acetabulum; but, on carrying the limb across the other, to the position in which it was at the moment of escape, the reduction was easily accomplished.

A second obstacle to the return of the head of the femur into the acetabulum is the fascia lata. The agency of this structure is analogous to that of the untorn capsule. This is shown by the following experiment:

A dissection was made, removing the integument and superficial fascia, preserving, however, as far as possible, the fascia lata and all the muscles about the hip. The capsular ligament was completely removed, and the round ligament was divided. A dislocation was now easily effected by carrying the limb across the other, and pushing against the knee. A far less degree of distortion, however, characterized the malposition of the joint than when the anterior and inferior portion of the ligament is left attached to the bones. Extreme efforts, by extension and counter-extension, in the old way, failed to effect the reduction; but both Reid's method, and that practised by myself, readily replaced the dislocated bone. Observation during the several steps of both methods of procedure, detected the fact above stated, that the pressure of the outer portion of the fascia lata upon the trochanter major, by forcing the head of the femur down, and causing it to hook against the acetabular walls, prevented reduction. Internal rotation completely relieved this pressure, and eluded this opposing agent.

The great practical rule growing out of these facts our author states is this: "In *all* dislocations, place the limb in just the *position which characteized it at the moment of escape*, and the reduction will then be easily effected."

The special applicaton of this rule to dislocations upon the dorsum ilii is as follows: "the patient lying on his back, carry the limb across its fellow at a point corresponding with the union of the middle with the upper third, rotate inwards, and the pelvis being fixed by an assistant, the head may now be readily drawn into its place;" and in dislocation into the sciatic notch "the limb should be carried across the opposite groin, and rotated internally, previous to any extension being made."

While we cannot ignore entirely, as the author does, the agency of muscular contractions in opposing the reduction of dislocations of the hip, we feel confident that in the facts stated and the directions given, Dr. Gunn has made substatial contributions to our stock of surgical knowledge and remedial measures. We have long known Dr. Gunn as an able and accomplished teacher, and the present brochure only serves to confirm our previous estimate of his ditinguished abilities.

ART. V.—*The Physiology of Common Life.* By GEORGE HENRY LEWES, author of "Sea-side Studies," "Life of Goethe," etc. In two volumes. Vol. I. New York: D. Appleton & Co., 1859.

In this volume MR. LEWES discusses Hunger and Thirst The Nature of Food, Alimentary Principles, the Articles of Food, Digestion and Indigestion, the Structure and Uses of Blood, the Circulation of the Blood, Respiration and Suffocation, and Why are we Warm and How we keep so. These are matters which affect all of us, in which sense they are properly said to be common, and they are here treated of philosophically but plainly, in a manner that is free from technicalities and from pedantry. As far as we have examined the volume, it not only conveys a deal of useful knowledge, but will be as easily comprehended by the non-professional man as by the professional. MR. LEWES does not simply take the current notions of the profession on the subjects which he discusses—and he is familiar with all that science teaches; he has studied these things for himself, he has his own notions, and he does not hesitate to dissent from the highest and most authoritative teachers, and to point out their errors, their short-comings, and their fallacies.

For example, he objects to the chemical theories of food and digestion, and protests energetically against the investigation of questions purely physiological by chemistry. He says:

> The researches into the nature of Food have been extensive and minute, but they have been almost exclusively confined to alimentary substances, which have been analysed, weighed, and tabulated with great labor, and in a chemical point of view with considerable results; but in a physiological point of view—the only one really implicated—with scarcely any results at all. No one doubts that Food is a physiological question, inasmuch as it relates to an organism. Nevertheless it has fallen into the hands of the chemists; and our treatises, text books, and popular

works, have been encumbered by hypotheses which may amuse speculative ingenuity, but furnish very little positive result.

Against this vice of Method, and this misdirection of valuable labor, a voice should energetically be raised. The error is not a speculative error, simply; it is one carrying important consequences; it either leads physicians and farmers into serious mistakes, or leads them to throw up scientific guidance in disgust, because the hypothesis, so convincing on paper, turns out stubbornly irreconcilable with fact.

And he insists, in reference to the question of food, that it must no longer be left in the hands of the chemist, if any practical solution is to be arrived at, but must be grappled by the physiologist.

Not a step can the physiologist advance without the assistance of the chemist; but he must employ chemistry as a means of *exploration* not of *deduction* —as a pillar, not a pinnacle—an instrument, not an aim. The chemist may analyse fat for him; but he, on receiving this analysis, will request the chemist *not* to trouble him with hypotheses respecting the part played by fat in the organism: for although the chemist may accurately estimate the heat evolved in the oxidation of so much fat, the physiologist has to do with a vital laboratory, extremely unlike that in which the chemist works, and he has to ascertain how the fat comports itself *there.*

Alimentary substances are substances which serve as nourishment; but a great mistake is made when it is imagined that their nutritive value can chiefly reside in the amounts of carbon, nitrogen, hydrogen, oxgen, and salts, which they contain; it resides in the relation which the several substances bear to the organism they are to nourish.

* * * * * *

"Vital processes depend on chemical processes, but are not themselves chemical, and cannot, therefore, be explained by Chemistry. There is something *special* in vital phenomena which necessarily transcends chemical investigation. We need not pretend to settle *what* vitality is, or on what the speciality of its phenomena ultimately rests, to be assured that it is something different from what goes on in laboratories, and demands other tests than those furnished by Chemistry."

All these chemical explanations he considers as belonging at most to what BERZELIUS styles "the physiology of probabilities." Chemistry, confessedly, connot construct a complex organic substance, or even tell how it is constructed—it can only say of what it is constructed. The attempt to explain physiological problems by ideas drawn from chemistry, violates the cardinal rule which should be kept in mind by the seeker after truth: "*Never attempt to solve the problems of one science by the order of conceptions peculiar to another.*"

There is an order of conceptions peculiar to Physics, another peculiar to Chemistry, a third peculiar to Physiology, a fourth peculiar to Psychology, a fifth peculiar to Social Science. While all these sciences are intimately related, each has its sphere of independence which must be respected. Thus Chemistry presupposes Physics, and Physiology presupposes Chemistry; but physical laws will not alone explain chemical phenomena, chemical laws will not alone explain vital phenomena; nor, conversely, will Chemistry solve physical problems, nor Physiology solve chemical problems. In every vital process physical and chemical laws are implied, and the knowledge of these becomes indispensable; but over and above these laws, there are the specific laws of Life, which cannot be deduced from Physics and Chemistry.*

These extracts will serve to show the spirit which informs the author. We repeat that the book is a good one —and we have yet to see, indeed, one of Appleton's that is not.

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*What is said in the text is by no means to be interpreted as indicating belief in the so-called "Vital-force;" but the question will be fully discussed in the final chapter of this work.

ART. VI.—*Transactions of the American Medical Association.* Instituted 1847. Vol. XII. Philadelphia: Printed for the Association. Collins, Printer. 1859.

Since the publication of the Journal for February in which we noticed the reception of this volume, we have looked over it with some degree of care, and can only express the result shortly by saying that we are in a state of general and particular admiration.

Hitherto, we confess that we have not paid much attention to these yearly Transactions. To tell the truth, we have not had the exalted opinion of the Association that is entertained in some quarters, having regarded it rather as an arena where ambitious young men, of a noisy development, might have a chance to exercise their lungs, than as a place for grave scientific discussion—and thus far we see no reason to regard it in any other light.

Our practical acquaintance with the Association is rather limited. We attended one of its meetings about a decade of years ago. To do this required only a few hours of pleasant voyaging on one of our river steamers; but, apart from the pleasant voyaging, we, though not a member of the Association, had something for it to do—or, rather, for it not to do. We listened to the address of the retiring president, (the late Dr. J. C. WARREN, of Boston,) we looked on the face of the crowd—and, reader, a crowd has a *face* just as an individual has—we hearkened to some of the discussions; and then we left the meeting with the old school-boy and Horatian exclamation: *Ohe, jam satis!* (N. B. We were a great deal nearer our school-boy days ten years ago than we are now.) So it has continued ever since; though it is proper to say, in conclusion, that we succeeded in getting the convention to do, or not to do, according to our wishes—succeeded very handsomely and satisfactorily, and so quietly that nobody knew anything about it for a week or two. That is our personal experience of the Association, and as such we "give it in."

We wander, however, from the matter in hand, the Transactions, Vol. XII. Not having paid much attention, as we have just said, to the volumes published heretofore, we cannot say how this one compares with them in appearance and contents; but, regarding it singly and solely, we can say that while as to externals it is all very well, as to internals it is all very ill, being loose, crude, ill-digested, badly written, and for the most part unworthy of an Association composed of twenty-three hundred hundred and forty-six permanent members, constituting "the highest medical authority in this country, if not in the world," (vid. *Transactions*, p. 146.) The Association, as we see from the title, acknowledges a responsibility for the appearance, but it takes care to tell us, *in limine*, that it is not to be held responsible for the contents of the book. But the Association does not need to be told that, in spite of this disclaimer, it will be held responsible, that the volume will be looked upon at home, and especially abroad, as the annual flowering out, so to speak, perhaps the running to seed, of the American profession of medicine—a profession that, according to Dr. MILLER, the newly elected President, embraces forty thousand men, rightfully represented by the Association, and "far superior to the same number of medical men to be found in any quarter of the globe." As one of that forty thousand thus represented, we intend henceforth to look sharply to see *how* we are represented.

We may say that the "Minutes of the twelfth annual meeting," as a part of the book, are not free from the faults of the latter, while they have some of their own. They are either too little or too much: as a sketch of what was done and said in the meeting, they are too little; as a journal of transactions they are too much. They also indulge occasionally in critical appreciations, which seem to us misplaced. For example: they tell us that Dr. LINDSLY's address "was listened to with marked attention, and was an eloquent tribute to the dignity of the medical profession and the importance of its improvements," and that a certain report was adopted "after an able address by Dr. Davis." Now, of the retiring president's address, this, we believe, is true, and we have no reason to doubt its being true of Dr. Davis's; but why stop here? If it was proper to indulge in anything of this sort at all, why single out these two? Certainly there must have been other occasions. All this leads us to suggest to the committee appointed to draft "parliamentary rules applicable to the Association" (a very sensible notion, by the way) to furnish at the sam time a model for parliamentary records.

At the very threshhold of the volume we find the address by the chairman of the Committee of Arrangements —certainly a very handsome address, saying the right thing in the right way, even to the comforting assurance that the Association "has *not* wholly failed in the accomplishment of its aims." Following this is the address of welcome on the part of our State Medical Society, which is also very good, though scarcely full enough in its mention of what Louisville has done for legitimate medicine.

Among the first resolutions passed by the Association are two, reported by the Committee of Publication, to the effect that every paper intended for publication must be in the hands of the committee by the first of June, so prepared as to require no material addition or alteration; and that the "proofs" of such paper must be returned within two weeks, under the penalty of the paper's being omitted from the Transactions. These rules are not a whit too stringent. Many men, even those familiar with composiion, see errors of omission or commission after an article gets into print, something to be added or something to be taken away, which they did not see before, and these rules afford plenty of latitude to such; whilst the requirement in respect of "proofs" is absolutely necessary—we only wonder that such a rule has not been enforced heretofore.

DR. MCDERMOTT, of Ohio, offered a resolution that the Association recommend the establishment of Hospitals for the treatment of Inebriates, and he was appointed "a special committee" to report thereon at the next annual meeting. We trust that he will not fail to report, as so many of committees, special and otherwise, failed to do at the Louisville meeting, (vid. Minutes.) We are distinctly in favor of such hospitals. The thirst for strong drink is in many cases—many of those which are so deplorable—a veritable disease, and is to be treated on rational grounds, like any other species of disease. Rush was right in this matter; and we look with large faith and hope to the Hospital for Inebriates just established in New York.

The Association is hereafter to be divided into sections, thus: 1. Anatomy and Physiology; 2. Chemistry and Pharmacy; 3. Practical Medicine and Obstetrics; 4. Surgery. To these (we quote from the "minutes") "a section of meteorology, medical topography, and epidemic diseases, and of medical jurisprudence and hygiene, was added"—which is certainly "œcumenical" and large enough for two sections, and we cannot help thinking that it is two.

This phase of sectionalism will, we have no doubt, meet with general and hearty approval; it will not only greatly facilitate the transaction of business, but will lead, we hope, to a more searching inquiry into the character of papers offered for publication and for prizes, as it will afford time for such inquiry.

This mentioning of prizes, ("talking of guns"—you know, reader!) brings to mind the report of the "Committee on Prize Essays," which is in this neighborhood. We are not able to recall now the names of those who composed this Committee, but we should like to. These gentlemen evidently did not think much of the four Essays which they examined, and they absolutely recoiled from the examination of two others—and then they tell us:

> "More than one of the four essays we examined exhibited much labor, and a commendable scholarship in their preparation—are voluminous, and, in some respects, very meritorious papers; but, in the unanimous judgment of the Committee, neither of them possesses the degree and species of merit which should entitle its author to the Association Prize."

We are a little curious to know, whether in the essays which they examined "with critical purpose and effect," they met with a sentence, the equal, in construction and rhetoric, of the one we have just quoted? Their critical labors must certainly have exhausted or muddled them to result in such an "effect."

Passing over the proceedings now, we come to the report of the "Committee on Publication." We quoted a sentence from this report in our last number, but we now give the whole paragraph:

> "The Committee feel that it is due to the Association, as well as to themselves, to state that the unusual delay in the appearance of the last volume of the *Transactions* was due to causes entirely external to themselves. Notwithstanding that every effort was made by them to urge it to completion, they were unable to distribute it before the middle of December."

We said in our last that we should like to see *one* of these causes, and to our surprize, on turning over the page to mark the paragraph for the printer, we find that these "causes external to themselves" have resolved themselves into one. Now that we think of it, though, this ought not to create any surprise in us, for causes which are external to themselves, outside of themselves, may certainly be capable of any thing, especially of getting inside of themselves until they are reduced to one—one to the common eye, at least. This is what the Committee say:

> "The sole cause of this delay was the detention of proofs, partly on account of the distances to which some were

sent, but largely in consequence of their retention by the authors either for alterations or additions."

Exactly! The sole cause of the delay was "detention," and the "detention" was caused by "retention." What is it old Polonius says?

> "And now remains,
> That we find out the cause of this effect;
> Or, rather say, the cause of this defect;
> For this effect, defective, comes by cause."

And, to quote old Polonius again, "thus it remains, and the remainder thus: perpend"—or, if you prefer it, "gather and surmise:"

"The Committee endeavored to obviate some of these sources of delay by sending out a large amount of proofs at one time to different authors, hoping that chance might return them in their proper order; but this, in nearly every instance, led to disappointment, by the earlier articles being held back, thus preventing the printing of those that succeeded."

So the causes which had just now reduced themselves to unity, by a sort of intussusception as we suggested, have again become dual or plural, have got outside of themselves! Well—anything that they choose! But we do not understand the Committee exactly, in the preceding quotation. They sent out a large number of proofs, hoping that chance would return them in the proper order. Now, according to our notions, this is the very last thing they should have done. They should not have left anything to chance, but rather have taken all the chances—guarded themselves against chance. But we will not push the point, for it is possible that we do not see it.

Finally, the Committee ask for the passage of the resolutions, already referred to, in regard to MSS. We trust that these resolutions will be adhered to rigidly. Of all the Committees of the Association, we believe that of Publication is at once the most onerous, the most vexatious, and the most thankless in its office, and any thing which will lighten its labors, and remove the sources of annoyance, should be enforced without hesitancy. We suggest, though, that the next report should be submitted to a Committee before publication—but not to the Committee on Prize Essays, as constituted at the twelfth meeting.

Of the Treasurer's Report we have nothing to say, except that we object strongly and decidedly to the orthography of the Treasurer's name—CASPAR WISTER. We observe that it is so spelled, Wister, in the "list of delegates," in the report of the "committee of publication," in the list of "permanent members," and indeed wherever else it is seen in the *Transactions*. We hope this is a mistake. It is alien, foreign, abominable to us. But WISTAR—that is hallowed to us by all the memories of youth and early manhood! "Wistar's Anatomy!" Blessed old book! that to the eye and mind of the boy wast a marvel and a mystery; odorous old book! all redolent of the very anatomy which thou didst teach—how often do we see thee still, coming back to us with the green hills, the blue sky, and the bright faces of our boyhood! There, too, is "Pancoast's Wistar," companion of our early manhood—of days filled with that which can never more be ours—days, whose dreams and whose skies were all rosy and bright and golden—days whose memories are about us now, and "always must be with us, or we die!" Wister, indeed! No, don't change your name, doctor—don't you let any body else change it—if not for your uncle's sake and for his book's sake, at least for our sake and for DR. PANCOAST'S sake!

The report on Government Meteorological Reports, recommends that the Association co-operate in the collection of meteorological data with the Smithsonian Institution, the Patent Office, and the Medical Department of the Army—by whose agency, the Committee say, with truth, that "more is now being done to advance meteorology than has ever before been attempted under any Government."

"The Committee are authorized to say that if the American Medical Association enter upon this plan of co-operation, the Smithsonian Institution will, upon due notice, furnish to each observer, free of cost, printed instructions relative to the kind of instruments to be used, and the mode in which they are to be procured; also directions in detail for placing the instruments and taking observations, and a double series of blank forms, one for recording the observations when taken, to be retained by the observer; the other for a copy to be carefully collated from the original and transmitted monthly to the "Commissioner of Patents, Washington, D. C.," for the Smithsonian Institution."

And they recommend that each "County Medical Society" select some one to make and register observations, from which reports are to be made once a year to the "State Medical Society;" that from these reports the State Medical Society make an annual report to the Association; and, finally, "that the American Medical Association make the reports from State Medical Societies the basis of an Annual Report on the prevalent diseases, epidemic constitutions, and meteorological conditions which obtained throughout the United States during the different seasons and year."

These suggestions or recommendations seem to us feasible, and we hope will be complied with. The splendid results obtained by Lieut. MAURY, in analogous matters relating to the ocean, show us something of what may be done on land, and it must result in incalculable benefits. As a mere hint of what may be done in one direction, we see it stated that Prof. HENRY, of the Smithsonian Institution can predict the weather at Washington, hours in advance, by telegraphic reports from various points, and is enabled by this means, and is accustomed, indeed, to prevent the delivery of lectures at the Institution on inclement evenings. And here, in Louisville, we know of parties that habitually watch the telegraphic reports of weather at points west of us, on the isothermal line, and thus guard themselves against inconvenience and loss.

The "Report on Criminal Abortion" insists upon the appalling frequency of the crime, which it attributes to three causes: 1. A wide-spread, popular ignorance of the character of the act—a belief among mothers that the fœtus is not alive till after the period of quickening; 2. the supposed carelessness of the medical profession as it regards fœtal life; and 3. the defects of the law which "with strange inconsistency fully acknowledges the fœtus in utero and its inherent rights, for civil purposes, whilst personally and as criminally affected it fails to recognize it, and to its life as yet denies all protection." The notions of the reporters seem to us exaggerated, not purposely, but unconsciously. Be this, however, as it may, the legal defect spoken of is not confined to this particular act—it is met with frequently. There are numerous offences, which potentially, at least, if not actually, are highly criminal, yet they are simply recognised in their civil aspects—no human law of *society* has ever recognised them and punished them as criminal. And, as a general rule, we believe, the law makes a vast difference between offences against the individual and offences against society—the latter only, as they appeal directly to the general sense of safety, are technically criminal. Yet this crime against fœtal life, though *in esse* personal and individual, *in posse* appeals to society, for it strikes at the very root. And society has something to do with it in another sense. It is not alone mothers who are ignorant—doctors who are careless—or, as in some instances, knowingly criminal. The ignorance, the carelessness, the criminality—be it what it may—is not thus limited. The reader cannot take up a newspaper, whether daily or weekly, whether of small circulation, or large circulation, and more especially the latter, without finding in it advertisements, of which this, extracted from papers now before us, is a specimen, one out of two or three in the same paper—of course we omit name and residence, which are conspicuously given:

"Also, Agent for———'s MONTHLY PILLS—a sure and effectual remedy for Irregularities, Obstructions, &c. Price by mail, $1 and one postage stamp.

Caution.—These pills should not be taken during *pregnancy*, as they are sure to produce *miscarriage*."

Observe, that while this caution serves to evade the law, it directs parties to the very thing that is wished: the pills *must* be taken, because they *musn't*—*lucus*, *quia non lucit*. We suppose that in many instances these "pills" are worthless, so that such advertisements are merely modes of getting money under false pretenses; still the public mind is thus familiarized with the act which the Association denounces. Moreover, the advertisers take care to inform the public that they can be consulted privately at certain hours; and we all know what this means. Let the reader, wherever he may be, take up his morning paper and examine it.

Now, we have seen these advertisements mentioning reputable drug stores, small and great, retail and wholesale, whose proprietors have grown wealthy, and are in every way reputable men, who would scorn this thing as individuals—we say that we have seen these advertisements mentioning such houses as depositories of their medicines. But it is a business transaction! The scoundrels who make these articles pay largely to advertisers, pay high commissions to agents; and so the advertising or the agency, as it may be, is a mere business transaction! Yet, these parties, if not accessories to the fact—whose tremendous consequences are known to their general intelligence—are accessories before the fact, if such a term is allowable. Doubtless the law can be so framed as to reach some of these things, at least sometimes; but, after all, the suppression of criminal abortion must depend on appeals to the individual conscience, on the enlightenment of that; and in this case, as in many others, the conscience is apt to succumb to the pocket.. But here we must stop this notice —only, however, for the present.

Abstracts and Selections.

Case of Phantom Tumor.—The following interesting case of phantom tumor is taken from the *Medical Times and Gazette*, for December 10, 1859:

"F. M., aged 22, a well made, fresh colored, rather fat, unmarried woman, was sent from the country to Mr. Spencer Wells as suffering under ovarian tumour, and as a fit subject for ovariotomy. She was admitted, June 7, 1859. She stated that she had been in good health until two years ago; that since that time she had been obliged to give up all work, and that lately she had become thinner. She attributed the commencement of her illness to having received several severe kicks about the vulva and inner part of the thighs about a year before she had to give up work. She said that the kicks were followed by severe swelling and pain, and afterwards by escape of blood, both fluid and in clots, by rectum and vagina; that there was a recurrence of this hemorrhage several times during the year, and that the abdomen began to enlarge, and had continued to increase gradually up to the present time. She had undergone a great variety of treatment. She says the catamenia recur with only nine days' interval between the cessation of one and the commencement of the next period; that many clots come away; and that she suffers great pain in the back and loins for at least three days before the period, and for three days after it.

Present state.—Before examining the abdomen of this patient, and judging merely from her good color, plumpness, and rather hysterical excitable manner, Mr. Wells at once expressed his belief that a very evident enlargement, visible through the dress, and giving her the appearance of a woman at the end of pregnancy, was not owing to ovarian disease. On uncovering the abdomen the nature of teh case was instantly apparent. There was precisely that contraction of the false ribs, and the bow-like bulging or arching forwards of the recti from some four inches above the umbilicus down to the symphisis pubis, so well described by Dr. O'Ferrall, which is so very characteristic of these cases. She complained of great pain on pressure (even very slight pressure) on any part of the abdomen. The parieties were furnished with a thick layer of fat, so that the resonance on percussion was not tympanitic anywhere. The uterus was found to be in the normal state, but she complained that the examination was very painful, owing to tenderness of the vagina.

June 9.—Some medical visitors in the wards to-day being doubtful as to the nature of the tumor, and the accuracy of the diagnosis, Mr. Wells showed that as she was gradually brought under the influence of chloroform the abdominal tumor slowly but completely disappeared, the arched recti falling backwards, the diaphram rising upwards, until, when she was completely narcotised, there was not the slightest appearance of any tumor, and the abdomen was perfectly soft and flaccid. It was curious, also, to observe, that as she recovered from the effects of the chloroform the recti recovered their tension, the diaphram descended, and the tumor reappeared before she was completely awake. This was observed on more than one occasion when chloroform was used as a clinical demonstration of the case. It had been noticed that when she was asleep she lay flat down in bed, though when she was awake she wanted to be propped up to relieve dyspnœa.

The medical treatment consisted of assafœtida and valerian. Under this, and some good-humoured ridicule, she rapidly improved, and left the hospital on the 25th, going to the very brother she said had kicked her so brutally.

Hemorrhage from the Tonsil after Incision—Arrest by the Perchloride of Iron.—A surgeon, in the hope of giving exit to pus, punctured the tonsils of a charwoman who had tonsillitis. The punctures were made on successive days. No pus was discharged, but free hemorrhage occurred at each operation. After the lapse of twenty-four hours or thereabouts, the hemorrhage recurred, and continued until she had lost about four pints. On examination the blood was seen flowing freely, but not in jets, from one of the punctures. "The bleeding had not been a continuous oozing, but had been almost suspended at times, especially when the woman had become faint.

The woman's condition being such as to admit of no delay, Mr. Thompson at once prepared to place a ligature on the carotid, and the needful instruments were got in readiness. Before doing so, however, he determined, though without much hope of being successful, to make a trial of the perchloride of iron. This was done by carefully mopping the part dry by means of lint wrapped on the left forefinger, and then pushing a glass brush dipped in the fluid into the incision. After a few applications the bleeding was entirely stopped; in about a quarter of an hour, however, a slight recurrence necessitated a repetition of them, which were again successful. No return took place afterwards. The woman slowly regained her strength, and made ultimately a complete recovery.

Mr. Thompson stated that, although he had on several previous occasions easily arrested very formidable hemorrhages by resort to the perchloride solution, yet that on the present occasion he had not at all expected to be able to do so. He spoke most strongly as to the value of this agent when properly prepared according to the French codex."

Iodide of Potassium in Diseases af the Brain in Children.—Upwards of twenty years since the iodide of potassium was recommended by Roeser and others as a remedy of special power in hydrocephalus. Dr. JOHN COLDSTREAM states (*Ed. Med. Jour.*, Dec., 1859) that his own experience has led him, for a considerable time past, to its employment, almost exclusively, in the treatment of those ailments of children, which we cannot but regard as indicative of a tendency to hydrocephalus. In all cases in which, from the course of symptoms, I have reason to believe that the central organs of the nervous system, or their envelopes are in any degree affected with strumous inflammation (tubercular cerebritis or meningitis) or its consequences, after moderate purging, and perhaps application of leeches to the head, I am in the habit of prescribing the iodide, in doses from half a grain to three grains, every three or four hours, generally dissolved in some carminative water, and continuing it in doses, varied according to the symptoms, for many days, or even until convalescence is fully established; and I am quite satisfied that, under this treatment, with the occasional addition of blisters to the shaven scalp, I have seen far more prompt and decided effect produced upon the disease than I used to see under the old treatment.

When opportunities have been afforded of commencing the use of the iodide early, it has appeared in several cases to arrest the progress of the disease *rapidly*, so that the formidable effects of effusion, indicated by squinting and convulsions have not supervened. In less favorable circumstances, in cases where considerable prostration had succeeded to great febrile action, and in which starting and squinting had become prominent symptoms, I have seen, in not a few instances, the free use of iodide of potassium followed by amendment and complete recovery. In such cases, and in others still further advanced, I have generally given larger doses, even to the extent of four grains, several times a day, to children of from four to eight years of age.

The medicine is seldom refused by the patient, and I cannot say that I have ever seen it either increase the nausea that so frequently exists in the earlier stages of the disease, or produce any other untoward effect; especially have I never seen it induce salivation, which the drug sometimes seems to cause when given for other ailments.

It seems generally to act upon the kidneys; yet I cannot say the amount of relief to the head-symptoms bears any very obvious relation to the quantity of urine extracted.

Although I have no doubt that the iodide is more especially useful in cases where there exists more or less of the scrofulous diathesis, I have often used it with satisfaction in patients apparently free from all such taint; even in cases where the ailment seemed to have followed injury from external violence, as so often happens in young children. I am not prepared, however, to assert that the iodide is more useful than calomel in *all* cases of inflammation of the brain and its appendages. When we have to treat robust and full-blooded children, in whom there is good reason to believe that the threatened disease of the nervous system stands more or less directly connected with preceding disorder of the digestive organs, I have no doubt of the superior efficacy of the mercurial treatment, combined with antimonials and salines; but when, after having duly administered these, symptoms of cerebral disorder continue, I would have recourse to the use of the iodide.

In cases of convulsions from teething, which, amongst ill-fed children, living in badly-aired localities, are not unfrequently followed by hydrocephalus, I have used the medicine with much satisfaction.

I have occasionally employed the proto-ioduret of mercury, as advised by Evanson and Maunsell, but not with more obvious benefit than I have been accustomed to see resulting from the use of the iodide of potassium. During convalesence, I generally prescribe the iodide of iron; sometimes a vegetable tonic, combined with the iodide of potassium.

In several cases of recovery from severe attacks of meningitis, it has occurred to me to find the mental powers of the little patients considerably impaired. This result has occasionally been protracted for many years, and seems likely to prove permanent; but, generally, it has become less apparent, and ultimately passed off entirely.

In thus endeavoring to recall attention to what I believe to be a truly valuable agent in the treatment of a class of formidable diseases, I would not overlook the fact, that all past experience tends to assure us that a great majority of cases of disease of the brain in early life prove fatal under all kinds of treatment. In advanced stages of the tubercular forms of these diseases, we may not venture to hope for any great advantages in the use of the iodide of potassium. But I am disposed to agree with Drs. Copland, Willshire, and West, in believing that they may be cut short, if subjected to treatment in an early stage, more frequently than is generally imagined. My own experience leads me to regard the iodide as more likely than any other drug to promote this desired end; and my confidence in it, as *the* remedy best adapted to all stages of tubercular diseases of the head, is so strong, that whatever else might be done, or left undone, I would persevere in administering it, even in circumstances the most desperate. In almost all diseases of children, it appears to me right to continue treatment, even to the last. I am very fully satisfied that the use of the iodide never produces any bad effects, however frequently it may fail to do good.

American Journal of the Medical Sciences.

Chlorate of Potass in Mercurial Stomatitis, and in other Diseases of the Mouth. By M. J. V. LABORDE.—We give the conclusions arrived at in this interesting and important memoir, which obtained the Corvisart prize for 1857.

The chlorate of potass exercises a *distinctly curative* action. In no case tested was this action found deficient.

It possesses, besides, a preservative or prophylactic action, which permits of the administration, during one or two months, of the protiodide of mercury in doses of from fifteen to twenty centigrammes a day without the least injury to the cavity of the mouth; and the proof of such immunity being due to the chlorate of potass, is found in the fact of mercurial stomatitis being at once developed upon leaving off its use.

The time required for treatment of confirmed stomatitis varies with the intensity of the case. In ordinary instances, it never exceeds four days; in some extraordinarily severe cases, eleven days have been required. In almost every case, the first indications of amendment have shown themselves on the second or third day; and, according to what has been observed, the order in which these manifest themselves is: 1. In diminution and entire relief from pain; 2. In the diminution of the salivation, and of sub-maxillary or parotidean swelling, when this is present; and, 3. In the almost simultaneous disappearance of swelling of the gums, and a return to their natural color with the disappearance of ulceration where that has not existed previously to the stomatitis, in which case, of course, the chlorate of potass is ineffectual.

The increase of the dose does not add to the rapidity of cure, except in very bad cases. In those of medium severity, the dose of three or four grammes is sufficient; and its administration in the form of a julep is preferable to all other modes.

When employed as a gargle, it seems very effectual in cases where the symptoms are exclusively local, such as in mere swelling of the tissue of the gums, their discoloration, ulceration, etc.

Its action appears to be entirely localized to the mouth as is evinced by its being found in the saliva, as well as, its effects being exhibited in the mouth when administered internally; and it appears to act as a sort of specific against the effect of mercurial inflammation in this quarter. At the same time it does not interfere with the therapeutic action of this remedy.

Of nine cases of chronic gingivitis, eight of which were accompanied with alveolar suppuration, six cures were effected under its use; two cases were unsuccessfully treated in the same manner; and the one case, without suppuration, was cured only after a prolonged course of treatment.

In only one of these successfully treated cases of gingivitis was the remedy given internally. The cure was complete in twenty days, and the first symptoms of amelioration were manifested about the seventh day. In five other cases, in which the remedy was given internally, no effect was produced by it; but on being used as a gargle, its good effects were speedily apparent—four or five grammes at a time, used in this way, leading to recoveries in from three to eleven days.

The good effects of such treatment almost always begin to manifest themselves in these cases about the second day, and consist at first in a well-marked improvement of color in the gums, the diminution or cessation of purulent discharges, and the relief of pain. Even in the most obstinate cases, the swelling, discoloration, and pain soon subside—the suppuration alone being difficult to deal with. And in every case the dental tissues themselves rapidly recover their normal whiteness, however much this may have been altered.

In conclusion, it may be remarked that the chlorate of soda very closely approximates in its qualities the chlorate of potass; its solubility is greater, and its taste less disagreeable. Both are, therefore, applicable and efficient remedies in acute ulcerous stomatitis.—*Edinb. Med. Jour.*, Aug., 1859, from *Gazette Medicale*, May, 1859.

Use and Properties of Perchloride of Iron.—The solution of this persalt is now almost universally employed to arrest arterial or venous hemorrhage, resulting either from accident, or as a consequence of surgical operations. It has also been found useful in intestinal hemorrhage; in one case in particular, M. Demarquay, of Paris, administered, morning and evening, enemata of seven ounces of fluid, with twenty drops of the concentrated solution of perchloride of iron, and a tablespoonful of the perchloride syrup (five or six drops to the tablespoonful), where the hemorrhage from the bowels was considerable, and had resisted the ordinary remedies. The result was extremely satisfactory. The same surgeon relates a second case of extensive abscess of the shoulder, where an injection of iodine caused hemorrhage. This was arrested by throwing into the sac a lotion composed of seven ounces of water and ten drops of the perchloride.

In gonorrhœa and leucorrhœa, injections of the perchloride have been tried with success in weak and lymphatic subjects, the proportion of the perchloride being twenty drops to three ounces and a half of water.

As a *Hæmostatic.*—1. As a local or external hæmostatic, 3 to 5 parts chloride of iron to 100 parts of distilled water. Lint soaked in this mixture is to be applied with more or less pressure on the seat of hemorrhage. 2. As an internal hæmostatic, 1 part of chloride of iron to 50 of distilled water, sweetened to taste. One tablespoonful to be given every hour, or oftener, if necessary. The same formula, without sugar, forms a useful uterine injection or astringent lavement in cholera or colliquative diarrhœa. 3. A hæmostatic and resolvent ointment is composed of 4 to 15 parts of chloride of iron to 30 of axunge.

In a letter in the *Medical Gazette*, August 27th, Mr. J. Zachariah Lawrence states that having, a few months ago, drawn the attention of the profession to the powerful local styptic properties of the *solid* perchloride of iron, he has since that time found a superior method of employing it. "If the solid perchloride of iron be kept in a bottle, a small portion of it after a time deliqueces into a thick brown fluid, which is constantly kept in a state of supersaturation by the undelinquesced portions of the salt.

This liquid, applied by means of a spun-glass brush to a bleeding surface, arrests the bleeding almost instantaneously. This mode of application is particularly valuable in applying the styptic to such cases as excision of the tonsils, bleeding from the deeper-seated gums, &c."—*Pharmacutical Journal*, October, 1859.

Pathology and Treatment of Idiopathic Peripheral Neuralgia.—Mr. H. LOBB read a paper on this subject before the Harveian Society (Dec. 1, 1859). He commenced by dividing neuralgia into—1. Central; 2. Peripheral; and 3. Reflected. Of the central, arising from disease of the brain or spinal cord, he did not speak. The third division he proposed reserving for a future communication. The second were divided into idiopathic, traumatic, and neuromatous. Idiopathic peripheral neuralgia was described as a stabbing, darting pain referred to the course of a nerve, shooting down the nerve like lightning, coming on suddenly, lasting but a moment and repeated at intervals; the pain is so acute as to be unendurable if continuous. The part or limb affected with this form of neuralgia is colder, and the skin supplied by the neuralgic nerve is more or less numb, not tender to the touch, the patient liking to be rubbed, and frequently grasping the part with the hands and pressing it. If the neuralgia has lasted any time, there is more or less paralysis in the mucles supplied by the accompanying motor nerve. The author then gave, at some length, his views upon the generation and distribution of nerve-force from the capillary circulation, in order to make his description of the pathology of this form of neuralgia intelligible. He described a sentient nerve as a conductor to the brain of sensations taking place at the periphery; neuralgia is not, therefore, hyperæsthesia of its healthy function. During health a nerve has no sensation proper to itself; and if it be struck, cut, or torn, the sensation is referred to the parts to which it is distributed;

but in this form of neuralgia it is the nerve itself to which the pain is referred as darting up and down its course. A sentient nerve was likened to an iron conducting wire of a galvanic battery, which, if of a certain uniform diameter, conducts a given quantity of galvanism without being perceptibly affected by its passage; but if a portion of the wire be much finer than the rest, it becemes red hot, being unable to conduct the whole of the galvanism, the remainder correlating into heat. So in a nerve. From mal-nutrition, it is unable to conduct normal sensations to the brain; the nerve-current, by affecting the polarity of the nerve itself, gives pain in that portion of the trunk ot the nerve, its peripheric terminations at the same time being numbed. The author considered the indications for treatment, therefore, to be increased and healthy circulation, arterial and nervous. After enumerating the usual methods of treatment, he considered the only agent capable of carrying out these indications to be the continuous galvanic current; and he recommended, as the only apparatus that can be adapted to the surface of the body, and capable of generating a sustained current, the Pulvermacher chain—producing a continuous current of galvanic electricity in one uniform direction, mild, yet sufficiently energetic for medical purposes. Mr. Lobb then described the method of applying the chain, and exhibited some experiments with its aid—as the decomposition of water, contraction of muscles, etc. In the treatment of idiopathic peripheral neuralgia he looked upon the Pulvermacher chain as a specific. Immediately upon adapting the excited chain to the part, a genial glow is felt—not mere warmth, but a sense of vitality in the part; the patient is aware of a life-giving agent, and immediately says that he is relieved; the neuralgia disappears, and sensitiveness of the surface returns. The paper concluded with several interesting cases in which the continuous galvanic current afforded rapid and permanent relief.—*Lancet*, Dec. 10, 1859.

Predisposition to Inflammation Produced by Sections of the Sympathetic Nerve.—Claude Bernard, (*Med. Times and Gazette*) says: "When rabbits are placed under total abstinance they generally live a fortnight or three weeks; but when certain branches of the sympathetic nerve have been previously divided, the animals die within a few days when deprived of food, through acute inflammation of the viscera connected with the nervous twigs that have been divided. When, some time ago, I commenced this series of experiments, I discovered that the section of large divisions of the sympathetic nerve was, apparently, unattended with the slightest inconvenience as long as the health of these animals remained perfect. Some of them even became pregnant and brought forth their young; but so soon as a general debilitation of the system arose, from want of proper nourishment, acute inflammation was produced in the organs deprived of nervous influence. We had, therefore, succeeded in artificially creating particular idiosyncrasies in these animals, and could predict with perfect certainty that as soon as health failed, disease would arise on a given point."

New Mode of Extracting Gunpowder from Wounds.—When gunpowder is encrusted in the skin, it is customary to extract it by means of needles or the point of a bistoury. To save patients the pain of this operation, M. Busch applies to the part a solution of corrosive sublimate, five grains to the ounce. An eczematous eruption is thus excited, and the dried vesicles then contain the grains of powder, which are very easily extracted. The skin retains its normal color in the region thus treated, and no tatooing is observable.—*Arch. fur Path. Anat., etc.*

It is stated by M. Gamberini, of Bologna, that he has used the tincture of aloes with much success in the treatment of gleet, resorting fo this remedy when other injections failed. 14 parts diluted with 120 parts of water.

Light.—Light appears to have an influence on the transformations of amylaceous matters, dextrine, etc. By its sole influence it so modifies amylaceous matters as to turn them into sugar and dextrine when they are exposed to the solar rays at a temperature of 100 cent. It would also appear that animal starch (glycogenous matter) is transformed into sugar more rapidly and more abundantly under the influence of light than in the dark. It is very remarkable that animal fecula remains in the liver of frogs without becoming starch during winter, just as the vegetable fecula ceases its transformations. In these animals, also, the greatest richness in sugar coincides with the period of the ripening of fruits. The glycogenous matter may remain unchanged in the liver, like starch in tubers and grains, if the frogs are entirely removed from the light; then no sugar is formed. In this we may explain the rapid disappearance after birth of the glycogenous matter which exists so abundantly in the skin of the fœtus.—*Med. Times and Gazette*, from *Report of MM. Corvisart and St. Victor.*

On the Normal Hypertrophy of the Heart during Pregnancy. By M. Larcher.

The point the author here wishes to bring under the notice of the profession, he has had ample means of investigating at the Paris Maternite, for his investigations have been extended to 130 pregnant women, the bulk of whom succumbed to puerperal fever—no lesion having preceded or given rise to the condition of the heart observed in them. The conclusion he comes to is, that the *heart is normally in a state of hypertrophy during gestation.* The walls of the left ventricle become by at least from a fourth to a third in thickness, its texture being also more firm and its colour more bright—the right ventricle and the auricles retaining their normal thickness. These observations, made by M. Larcher, date back some thirty years, and have been confirmed by subsequent ones, made with great exactitude, by

M. Ducrest, upon 100 other women; but why this paper has been so long in being published no explanation is given.

Within certain limits this condition of things may coexist with the maintenance of health; but it none the less may be taken to express a predisposition to congestions and hemorrhages. If, as the general rule, the hypertrophy gradually disappears after parturition, it may be otherwise in exceptional instances, especially where the recurrence of pregnancy has been frequent, and with short intervals. Is not this a cause of the varied lesions of the circulatory apparatus so commonly met with in women who have borne many children, either at too premature an epoch, at too brief intervals, or during an unfavorable condition of health? There is every reason, too, to believe that the bronchitis, which is so common during pregnancy, derives much of its character of persistency from this condition of the heart. Again, may we not attribute to this the greater danger of pneumonia when developed in pregnant women, and the frequency with which abortion then occurs? The various forms of hemorrhage met with in pregnancy, as epistaxis, hæmoptysis, metrorrhagia and apoplexy, are likewise predisposed to by this hypertrophy, normal though it be. Although pregnancy may, in the majority of cases, suspend or render slower the progress of pulmonary consumption, the progress of this affection becomes accelerated after delivery, and the still hypertrophied heart increases the perturbation of the respiratory apparatus.—*Med. Times and Gaz.*, from *Archives Generales*, tome xiii. pp. 291—306.

Collyrium in the Opthalmia of New-born Infants.—M. Foucher employs the following collyrium:

Glycerine, viiij drachms; nitrate of silver, gr. 1½ ad gr. iij. The eye is first washed by injecting a very weak solution of chloride of sodium, and then a drop of the above collyrium is deposited on the internal surface of the eyelids by means of a small camel's hair pencil.

Editorial Department.

Commencement of the Medical Schools.—The commencement of the Kentucky School of Medicine took place on the night of February 28th, and that of the Medical Department of the University of Louisville, February 29th. The following are the lists of graduates:

Medical Department of the University.

A. W. Bare, Indiana; J. N. Clemens, Kentucky; B. C. Hubbard, Kentucky; O. F. Renick, Kansas; T. J. Ryan, Indiana; B. Johnston, Kentucky; R. M. West, Tennessee; W. F. Luckett, Virginia; W. W. Stewart, Kentucky; L. L. Ferguson, Ky.; T. H. Hopkins, Ky., W. H. Way, Ky.; J. Hall, Ky.; J. B. Shelby, Ky.; S. W. Lacey, Ky.; W. R. Hathway, Ky.; J. A. Morgan, Ky.; W. R. Vanhoke, Ind.; W. J. Johnson, Ga.; N. M. Brown, Mexico; J. Griffin, Ark.; J. H. H. Mills, Ky.; A. A. Wheat, Ky.; G. W. McLeod, Ky.; J. M. Young, Ky.; J. L. Price, Ky.; J. B. Evans, Ky.; C. C. McCarty, Ky.; R. H. Smith, Ky.; J. C. Ashford, Ky.; P. J. Johnson, Texas; R. C. Irwin, Ind.; C. A. Cox, Ky.; T. Martin, Ky.; T. J. Johnson, Ind.; J. C. Terry, Tenn.; W. D. Thomas, Ind.; W. E. Nash, Ky.

Kentucky School of Medicine.

Francis A. Anderson, Kentucky; John H. Bass, La.; Robert H. Beckham, Kentucky; Asa B. Bosley, Kentucky; George T. Collins, Kentucky; Augustus R. Cox, Kentucky; Luke H. Daniel, Indiana; William L. Deberry, Missouri; Robert Dinwiddie, Kentucky; Tandy L. Dix, Kentucky; William Feland, Kentucky; James W. Ford, Kentucky; Joseph Foreman, Kentucky; Thomas J. Griffith, Kentucky; Thomas H. Hall, Kentucky; R. W. Hazlewood, Kentucky: Jefferson P. Hodges, Kentucky; Wm. H. Jett, Kentucky; Richard F. Logan, Kentucky; Benj. F. McCawly, Kentucky; James R. McGee, Kentucky; David P. Middleton, Kentucky; Robert H. Minnis, Kentucky; Joseph H. Norris, Kentucky; Robert D. Porter, Kentucky; Matthew L. Reid, Kentucky; Daniel Roberts, Kentucky; John W. Rogers, Kentucky; Charles Seaton, Kentucky; Samual H. Staples, Kentucky; Enos L. Swain, Kentucky; Frederick M. Taylor, Kentucky; Robert M. Tevis, Indiana; Lindsly Watson, Kentucky; Eli D. Whittaker, Indiana; Mandly B. Winstead, Kentucky; Harvey Swift, Indiana.

Honorary degree—Samuel Anderson, Elizabethtown, Kentucky.

Prof. Bullitt's Valedictory.—We hear from some of our friends who were present that Prof. Bullitt's valedictory to the graduating class of the Kentucky School of Medicine was a very able one. Prof. B. spoke, in the presence of a densely crowded audience, to the largest graduating class that the School has ever had.

The surgical wards of the *Louisville Marine Hospital* furnished more than the usual amount of operative surgery during the past winter, whilst under the charge of Prof. Goldsmith, of the Kentucky School of Medicine. On inquiry into the facts recently, we received the following report:

Amputation of arm,	1	Radical cure of Hernia,	1
" of thigh,	1	Pterygium,	1
" of leg,	2	Strabismus,	1
" of toes,	2	Phymosis,	2
Trephining,	1	Cataract,	3
Strangulated Hernia,	1	Excision of astragalus,	1
Necrosis,	3	Excision of trochanter major and cervix fem.,	1
Hydrocele,	1	Refracturing bones of leg,	1
Varicose veins,	2	" " arm,	1

Besides this, the Hospital has presented the usual variety of fractures, dislocations, wounds, burns, and other injuries, and the usual amount of surgical disease.

UNITED STATES MARINE HOSPITALS.—Senator Pugh, of Ohio, has introduced into the United States Senate a resolution of inquiry into the expediency of abolishing the system of Marine Hospitals at present sustained by the Government There is a growing sentiment that all the advantages derived from these hospitals, could be obtained in other modes at much less cost.

A Boston publishing house proposes to publish shortly forty plates from designs on stone, drawn by the late Dr. James Deane, of Greenfield, representing the most valuable specimens of fossil foot-prints discovered by him in the old red sandstone of the Connecticut Valley. The drawings are said to be executed with wonderful skill. The publication is for the benefit of Dr. Deane's family.

THE LATE DR. R. B. TODD, OF LONDON.—We are indebted to the *Illustrated London News*, for the following notice of this gentleman:

"This eminent physiologist and physician has been suddenly removed from the sphere of his labors, just as he had attained the zenith of his fame, and when his great and varied experience was being most widely employed in the exercise of his beneficent profession.

"The son of a distinguished surgeon and professor in Dublin, whose sudden and early death, likewise in the full tide of professional success, spread a gloom over that city and evoked universal regret and sympathy. Dr. Todd graduated at Trinity College, and came to London as a young man, with nothing but his own character and energy to rely on for pushing his fortunes in this metropolis. He first contemplated pratising as a surgeon, but finally took an *ad eundem* degree at Oxford, and joined the College of Physicians. From the first he had shown the strongest taste for anatomical and physiological pursuits, which he followed with uncommon ardour, and became a lecturer on these subjects in the schools. They were the foundation of his subsequent success, giving to his thoughts and views that sound practical tone so much in harmony with the force of his own character, and which impressed itself so strongly on the medical doctrines of the day. It has been a distinctive feature of English anatomists and physiologists that they have for the most part kept steadily in view the application of these sciences to the investigation and treatment of disease. That practical turn of mind which so characterises our countrymen has led here, as in many other walks, to remarkable results, and no better instance could be adduced than that of the subject of this notice. He looked on all disease as one thoroughly conversant with the several avenues and processes of the body deranged by it, and was thus enabled not only to see comprehensively and to teach decidedly the phenomena before him, but with all the energy of a wonderfully active mind to take a leading part in moulding the theories and practice that were current in his youth into conformity with the requirements of an epoch in which physiology has made greater strides toward the perfection of a science than in all former periods combined. He did not look at diseased processes merely as such, but at disease in contrast with health,, and he had the courage to write and teach fearlessly the conclusions to which he he was led, but always with simplicity, honesty, and candour.

Soon after coming to London, Dr. Todd projected a work of great extent and reputation—the "Cyclopædia of Anatomy and Physiology," which, after many years of tedious delays, was completed under his editorship, he himself having contributed to it many important articles. He was also joint author with Mr. Bowman of the "Physiological Anatomy and Physiology of Man," a work which contained some new views, and is well known among men of science. He was the author of many other works. After being appointed Professor of Physiology and of General and Morbid Anatomy in King's College, in 1837, he took a leading part in originating King's College Hospital, an institution which is largely indebted io him for its rapid progress under great difficulties, and from which he had been mournfully forced to retire only two months ago by the extent of his private engagements and the painful consciousness of failing health.

In the midst of work so incessant—literary, educational, and among active men of business—his gradually augmenting practice left him no leisure; yet, so long ago as 1847, he circulated a document among some friends, including the late Bishop Blomfield, which led to the foundation of St. John's Training Institution for Nurses—an institution that supplied Miss Nightingale with some of that first devoted band which left England for Scutari in October, 1855, and which has now for some years, as a portion of its duties, in addition to private nursing, performed all the nursing in King's College Hospital.

Dr. Todd's last illness was painfully sudden, and illustrates the laborious employment which a London physician in the highest department of practice must undertake. Having been summoned to Wales, he slept on his way home, on Sunday night, the 29th of January last, at Gloucester, and on waking next morning felt ill. He however, reached his residence in Brook street at noon, and thought himself able to see and prescribe for a few cases of urgency. At two o'clock he was seized, in his consulting room with hemorrhage from the stomach, so severe as to prostrate him, and it continued to recur to such an extent as to terminate his life soon after eight o'clock, in the fifty-first year of his age."

The Cleveland papers state that two hunded convicts are now sick in the Ohio Penitentiary with what is denominated *corn bread diarrhœa.* The disease has assumed an epidemic form, and appearances at present are alarming.

ANCIENT AMERICAN RUINS.—In the Fort Smith (Arkansas) Times we find the following account of the ruins of an ancient city in New Mexico, some ninety miles northeast of Fort Stanton, which if these statements are true, offers a promising field for the explorations of the archæologist, and may afford some clue to the history of the ancient inhabitants of the continent:

"The plain upon which lie the massive relics of once gorgeous temples and magnificent halls, slopes gradually eastward towards the river Pecos, and is very fertile, crossed by a gurgling stream of the purest water that not only sustains a rich vegetation, but perhaps furnished with this necessary element the thousands who once inhabited this present wilderness. The city was probably built by a warlike race, as it is quadrangular and arranged with skill to afford the highest protection against an exterior foe, many of the buildings on the outer line being prepared with loopholes, as though calculated for the use of weapons. Several of the buildings are of vast size, and built of massive blocks of a dark granite rock which could only have been wrought to their present condition by a vast amount of labor. At the present time the best tempered tools, in the hands of the most skillful workmen, could scarcely produce an impression on the surface. In one place a pile of ruins appear to have been intended for three separate buildings, each about three hundred feet front, with the intervals between them occupying one thousand feet. The main building is constructed with great neatness and care, of ponderous blocks of the material before mentioned, of a nearly cubical form, which, allowing one thousand five hundred ounces as the weight of a cubic foot, would be found to weigh more than three tons each, and could only have been transported from the distant quarry and placed in their present elevated position with prodigious labor. The walls of this building are at the present time from thirty to thirty-five feet in height, while the surface of the ground is strewn with huge masses of fallen blocks, which have probably been displaced from their former position by the action of some great disturbing agency, such as a volcanic eruption, which would lead to the conclusion that they once rose to a great altitude. This temple (as it may properly be termed) is entirely destitute of any partition, or the appearance of their former existence, and appears to have been designed by its architects as a vast hall to be used for the performance of solemn religious rites or the celebration of public feasts. The pavement is hid from view by a confused mass of building materials, among which are to be found fragments of carving in bas-relief, and fresco work of superior design and execution, which would justify the conclusion that these silent ruins could once boast of halls as gorgeously decorated by the artist's hand as those of Thebes and Palmyra. This series of buildings are all loopholed in each side, much resembling that found in the old feudal castles of Europe designed for the use of archers. The blocks of which these buildings are composed are cemented together by a kind of mortar of a bituminous character, which has such tenacity that vast masses of wall have fallen down without the blocks being detached by the shock. The slight examination which has been made by officers of the United States army indicates the presence here of objects of rare curiosity."

And here is the analogue of this, from the old world:

"DISCOVERY OF ANCIENT CITIES.—Mr. C. C. Graham, an Englishman, who has lately been travelling in the East, has made some antiquarian researches of the highest interest in the Great Desert beyond the river Jordan. He found, far to the east of the district of the Hauran, and in a region unvisited before by any European traveller, five ancient towns, all as perfect as if the inhabitants had just left them, the houses retaining the massive stone doors which are characteristic of the architecture of that region.

One of the cities is remarkable for a large building like a castle, built of white stone, beautifully cut. Further eastward other places were found where every stone was covered with inscriptions in an unknown character, bearing some apparent likeness to the Greek alphabet, formerly in use in Southern Arabia. Copies and impressions of several inscriptions are presented, and will no doubt engage the attention of Orientalists."

THE TROOST CABINET, NASHVILLE.—We are glad to learn from the *Nashville Journal of Medicine* that a bill has been introduced into the Tennessee Legislature looking to the purchase of Dr Troost's cabinet, which was sometime since offered for sale in parcels by Dr. Troost's heirs. Our readers have all heard of this cabinet; it is without a rival in the Missisippi Valley; and we should regret exceedingly to see it dispersed, as it would be by sale in parcels. To retain it, preserved in its original integrity, should be a matter of just pride to the State and city of the collector's residence. And we will add that it would be a graceful act on the part of the State, after securing the collection, to present it to the Nashville University, of which Dr. Troost was an alumnus and for twenty years one of the chief ornaments.

At the meeting of the American Medical Association, held in Louisville, Ky., May 1859, the undersigned was appointed Chairman of a Committee to report on "*The influenee of sewerage and drainage of large cities on public health.*" Any communications, documents, statistical or topographical reports, facts, suggestions, or other matter relative to sanitary police, will be thankfully received and duly acknowledged.

As the residence of the undersigned will be permanently fixed at New Orleans, La., on and after February 1st, 1860, any communications, intended for him, must be addressed to the above city. A. J. SEMMES, M. D.
Chairman of Committee

LOUISVILLE
Medical Journal.

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Original Communications.

Art. I—*Seven Cases of Uterine Polypus, with some Remarks upon the Treatment.* By Middleton Goldsmith, M. D., Professor of Surgery in the Kentucky School of Medicine, Louisville, Ky.

Case I.—*Spontaneous Expulsion af the Polypus.*—I was called to see a lady, a resident of Sudbury, Vermont, about twenty-five years of age, and the mother of two children. She had suffered one miscarriage. For some months subsequent to this miscarriage she had been attacked by frequent hemorrhages, having no fixed relation to the catamenial periods, and had also suffered at irregular periods from some labor-like pains. Her appearance was somewhat anemic. She drew my attention to the fact of a fetid discharge from the vagina, which she said had existed for several days. A digital examination disclosed a large polypus projecting into the vagina, so softened by decomposition that it could not be abstracted in mass, breaking down into a flocculent pulp under the fingers. Enough could be seen of its structure, however, to determine that the tumor was fibro-cellular. She stated that, during one of the expulsive pains mentioned above, she felt something pass into the vagina, and that in a day or two after this occurrence fetid discharges began to take place.

I directed her to wash the vagina frequently with water by means of a syringe. She recovered quickly and has since borne children. It is obvious that in this case the pedicle of the tumor was strangulated by the constriction of the os uteri.

CASE II.—*Expulsion by Ergot.*—Mrs. W., æt. about forty, residing in Arnell, Vermont, had borne several children, and had subsequently three miscarriages. For several months previous to my visit she had suffered from both uterine hemorrhages and labor-like pains. The bleedings were always associated with expulsive pains; but the pains sometimes occurred in the intervals of the bleedings. Neither the pains nor the hemorrhages had any fixed relation to the menstrual periods. My aid was sought in the case with reference to the flooding. In making a vaginal examination I found the os uteri open, and the fundus of a large firm-feeling polypus just within the os uteri and distending the neck of the organ. There was also some abdominal enlargement. The patient was put upon the use of ergot, in the hope that the polypus might be expelled into the vagina, or at least so far protruded through the os uteri that it could be seized for the purpose of removal.

The patient's residence was some thirty miles from my own, so that I could not conveniently see her until the succeeding day. At my next visit I learned that the first few doses of the ergot had produced strong expulsive pains, and I found on examination that the polypus had descended into the vagina. The expulsion, it was evident, must have been produced soon after the administration of the first dose of the medicine, for the tumor was not only dead but already fetid. A ligature was placed around and through the mass, and the separation was left to the natural processes. The nurse was directed to pull upon the ligature from time to time in order that the polypus might be extracted at the earliest possible moment. A solution of the sulphate of zinc was injected into the vagina several times in the day. The tumor was extracted by the nurse on the seventh day, reckoning from that on which the expulsion into the vagina occurred. The fetor abated almost wholly during the use of the zinc. The tumor proved to be fibrous, not very firm, and was about the size of a goose egg. The woman made a good recovery.

CSAE III.—*Fibrinous Polypus expelled by Ergot.*—Mrs. ——, a lady, æt. about thirty-five years, the mother of several children and the subject of several miscarriages, a resident of one of our sea-board cities—she was sent to the country that she might get the country air. She was pale, anemic, and exceedingly nervous. She had suffered frequent and exhausting hemorrhages, but no decided expulsive pains. The hemorrhages were at irregular intervals, and for the most part, brought on by any kind of exercise. Soon after her arrival in the country, I was summoned on account of an unusually profuse bleeding. This had ceased before my arrival. In addition to the foregoing facts, I learned that she had been repeatedly examined by the family attendant, on suspicion of her having a polypus, but that none had been discovered. I found that the uterus could be felt through the abdominal walls, rising well above the pelvic cavity, and feeling to the hand something larger than at the termination of labor. I also found on examination per vaginam that I could pass the finger readily into the os uteri and could feel obscurely a soft elastic mass in the uterine cavity. I advised the attending physician to administer ergot freely, and to plug the vagina in case of a recurence of the hemmorrhage.

This patient's residence being some twenty-five miles distant from my own, I was not able to see her until the second succeeding day. I learned at the second visit that the ergot, which had been administered according to agreement, had acted well, producing strong expulsive pain and also some bleeding, but not enough of the latter to require the tampon. These expulsive efforts had continued through the night, and early in the morning of the day of my last visit she had been delivered of a large fibrinous polypus—

as large as a full grown fœtal head, as well as I could measure it in its torn condition, for the mass had to be extracted piece meal from the vagina. Our patient had no recurrence of the hemorrhage, and from the date of the expulsion of the polypus she slowly and gradually recovered her health.

The structure of the tumor resembled that of fibrinous coagula in the heart, and it seemed to have been penetrated by recent blood coagula at various points of its substance.

VELPEAU, (Mott's edition, Vol. III, p. 807,) relates at large a case of the same kind, and adds as his opinion of of the development of these tumors: "A sanguineous concretion, resulting from the catamenia, or some discharge of blood, engrafts itself upon the neck of the uterus, and ultimately becomes organized there. I have now seen four examples of this kind at different degres of organization."

CASE IV.—*Soft Mucous Uterine Polypus removed by Evulsion and Crushing, aided by Ergot.*—Dr. Weatherford, of this city, requested me to see with him a lady, æt. about thirty, who had suffered for some time with severe and repeated hemorrhages. It was known that she had uterine polypus, for Dr. W. had been able to feel it occasionally protruding well from the uterus. We found, on examination with the speculum, a small whitish body just visible within the os uteri. The tumor, however, could not be got hold of then for the purpose of bringing it down into the vagina. When an attempt was made to grasp it with the forceps the polypus would slip upward into the uterus and out of sight. Dr. Weatherford informs me that at a subsequent visit he found the tumor protruded so far into the vagina that he had no trouble in seizing it (as was agreed on in such a contingency) with the forceps. In the attempt to twist the polypus off, however, it was partly torn and partly crushed, the mass not having sufficient consistence to bear perfect evulsion. There was some fetid discharge from the vagina for several days after the operation, but no hemorrhage.

CASE V.—*Uterine Polypus removed by Evulsion.*—Mrs. ——, æt. forty-one years, the mother of several children, since the birth of her last child has had two miscarriages, and since the last miscarriage has suffered from repeated and exhausting hemorrhages. When I was called in by her attending physician she was almost bloodless. I learned from her that she had no serious hemorrhage prior to her last miscarriage. On examination I found a small mucous polypus adhering by its pedicle just within the os uteri, the fundus occupying the mouth of the uterus. The attending physician at once introduced his finger and tore off the polypus from its attachment. A very trifling bleeding was produced by the operation. She had no recurrence of hemorrhage, and slowly recovered. She was one of the few persons whom I have seen recover when they had nausea and vomiting as consequences of the protracted loss of blood.

CASE VI.—*Large Fibrous Uterine Polypus, by turns protruding through the vulva, and receding.*—Miss ——, a pauper residing in Bridgeport, Vermont, came under the care of Dr. Stevens, of that town, and at the instance of the selectmen I was requested to see her. I found protruding from the vulva a tumor, somewhat bi-lobed in appearance, and as large as two turkey-eggs joined at their sides; the stalk or pedicle, about the thickness of the wrist, could be traced a finger's length into the vagina. The woman was intensely hysterical, and was unwilling to submit to an operation. When I came to examine her a second time, after having expressed to Dr. Stevens in her hearing the intention of removing the polypus, I found that the latter had completely disappeared, nor could I feel it in the vagina in the course of the somewhat unsatisfactory examination which the patient grudgingly permitted to be made. I then learned from herself and Dr. Stevens that she had the power of expelling the tumor and of withdrawing it at will. In this state of the case, and not able to remain longer at that time, my residence being some sixty miles distant, I appointed my second visit for that day week, and requested Dr. S. to give her full doses of ergot at proper intervals prior to the hour appointed for meeting him.

The ergot acted well. I found the double-headed polypus projecting from the vagina; got hold of it, and pulling it down well, I slipped over it a strong ligature which I had secretly carried under the bed clothes, and thus was enabled to tie the stalk at its upper part without the patient's being aware of the fact until the ligature was tied and cut off so close that she could not well interfere. She was terribly angry when told of what had been done; but there was no help for her. The tumor was fibrous in substance, but succulent, and friable to such a degree that the bite of the ligature was very little larger than a goose quill (as learned when the polypus came away) although the stalk at the place tied was nearly as large as the wrist. The woman had been bedridden for years, and had been a town charge for ten or twelve years. She had no unpleasant symptoms, for the putresence of the mass was almost completely prevented by inserting into it crystals of the sulphate of zinc, and inserting into the vagina antiseptic liquors. I could not learn anything satisfactory as to her history.

CASE VII.—*Fibrous Uterine Polypus treated with Ergot and the Ecraseur.*—For the particulars of the following case I am indebted to Dr. G. W. RONALD, of this city.

Ellen, a negress, æt. 29, married, but without children, states that she has had frequent uterine hemorrhage for the last two years. For the first fifteen months the bleeding was not profuse, but consisted of a tolerably constant oozing, with the occasional expulsion of coagula after any unusually active labor. Nine months before coming under

Dr. Ronald's charge she had an attack of profuse and exhausting hemorrhage. For the last three months she has had at each menstrual period severe labor like pains, followed by the expulsion of large blood coagula. On her arrival in this city she was so much exhausted as to be unable to walk, or even to sit up except for a few hours at a time. On examining the abdomen the uterus appeared to be considerably enlarged. When the finger was passed into the vagina a firm feeling tumor was discovered, projecting partially through the mouth of the uterus. Prof. Hardin was called to the case in consultation with Dr. Ronald. It was then decided that the case was one of polypus uteri. Drs. H. and R. determined upon the administration of ergot to complete the expulsion of the tumor into the vagina. Accordingly drachm doses of the tincture of ergot were given, at intervals of three hours, for the space of sixty hours. At the expiration of this period the tumor was found protruding from the uterus to an extent sufficient to allow it to be seized.

Operation.—The patient having been placed in a convenient position, Prof. Hardin, with Dr. Ronald's assistance, seized the tumor and drew it down through the vulva so far that the chain of the ecraseur could conveniently be passed around the pedicle. A few turns were slowly given to the lever and the excision was effected. No blood was lost. The woman made a good recovery. Dr. Cook, Dr. Middleton, and myself were present at the operation.

Spontaneous Separation.—Cases of this kind have been noticed by various authors. Levret mentions two; Mauriceau, Ruysch, Hoffman, Donatus, Rhodion, Vacoussin, Hue, Gooch, Hervey de Chegoin, have noticed such; Griffith and Guillon have produced the same event by the use of ergot, (vid. Velpeau's *Operative Surgery*, Mott, vol. III, p. 811.) Ashwell mentions a case, occurring in Guy's Hospital, in which the patient was attacked with vomiting, and had expulsive uterine contractions so strong that the pedicle of the polypus was ruptured and the polypus expelled. Lisfranc reports two cases, in each of which he found the polypus so softened and macerated that he was able to detach it by tearing, (*arrachement.*.)

Meigs relates the case of a negress where the polypus was detached and expelled from the vagina. Ashwell relates two cases in which the pedicle was so attenuated by the weight of the polypus that spontaneous separation took place; and also another, in which the pedicle was cut across by the ulcerative process.

Evulsion—Torsion.—Dionis, Juncker, Heister, Mayor (in *Gazette Med. de Paris*, vol. XII), Lapeyronie, and Boudou practiced evulsion with torsion. Recameir tore a polypus out with his finger nail. Stall and Velpeau have each removed one in the same way. Hevin contrived an instrument with which the pedicle could be grasped hard upon the uterine wall, and afterwards twisted off on the distal side of the grasp, thus avoiding all injury to the uterus. Velpeau uses small polypus tenacula to tear out small mucous polypi situated on the neck of the uterus, (vide Velpeau, *supra*, p. 810.)

Lisfranc reports a case in which, while he was making an effort to bring the tumor into the vagina for the purpose of excising it, he heard a sound as if something had been torn, and straightway found the polypus detached. In a case of fibroid tumour which he found protruding into the vagina, he lacerated the lining membrane and removed the tumor forthwith.

Skanzoni, (*Beytrage zur Geburtsrunde*, 1855,) gives the results of his observations in thirty-one cases of uterine polypus (twenty fibrous and nineteen mucous polypi.) They were of various shapes and sizes. Of the fibrous polypi seventeen were seated on the posterior, three on the anterior, and two on the lateral wall of the uterus; the most of them were pyriform, only the largest of a spheroidal shape; of the mucous polypi all but one were seated in the lower third of the uterine cavity. He expresses his surprise about the frequent neglect of vaginal examination. In referring to the treatment he is particularly in favor of excision, but he admits the existence of cases with so large a peduncle that excision cannot be practiced; under such conditions he followed torsion, or the ligature.

Crushing.—Recamier crushed the polypus in two cases—in one with his finger, and in the other with the forceps. But it is doubtful from his report whether in the latter case the crushing was intentional or not.

Enucleation of polypi has been and still is practised by some surgeons. It seems to me, however, that the practice is open to objection in cases of polypus, whatever its merit may be in fibrous tumors embedded in the uterine wall, when made either for the arrest of the hemorrhage, or the ablation of the tumor. The great objection is that the mucous covering or cyst of the discontinuous tumor—for of course enucleation is not practicable in continuous growths—is left *in situ*, and demands for its removal a second operation, which in its very nature is attended with all the hazards of a primary operation. The following case presents the condition of things to which reference is made. The case is condensed from the *Medical Times and Gazette:*

Mr. Hine, in October, 1859, removed a fibrus polypus which had been known to exist for four years or more. It ultimately protruded through the vulva. He divided the capsule and enucleated the tumor. Some days afterward the capsule of the tumor was found attached to the posterior lip of the uterus. This was grasped with hooks, and, whether designedly or not, was torn away—smart bleeding followed. The patient died ten days afterwards of pyæmia, as was supposed.

The Ligature.—The use of the ligature dates from the era of Philotenus. Levret, however, may properly claim the credit of applying it first to polypi while contained in the uterine cavity as well as in the vagina, or to those protruding within the vulva. He used a silver wire for ligaturing the pedicle. The practice, with the common ligature, has been followed by surgeons down to our own times; we are all familiar with it, as well as with the various contrivances for the application of the ligature. The only material alteration which has been made in Levret's practice is that which seeks the expulsion of the polypus into the vagina, or which seizes the polypus in the uterine cavity and draws it through the os uteri. Levret tied the polypus *in situ.* There has been some discussion in regard to the effects of the ligature upon the proximal portion of the pedicle. Levret and Genseul contended that the stalk, whenever it was tied, separated at the point of its implantation on the uterus. Boyer and Velpeau deny this; rather, Boyer denies it *in toto*, and Velpeau, while he admits that it may accur in fibrous or lardaceous (?) polypi, denies that it is possible in any other kind. Lisfranc relates that while attempting to complete excision of an intra-uterine polypus, he being unable to reach its pedicle, excised one-half the tumor, and the remainder was spontaneously expelled. Ashwell declares the ligature to be the safest and most appropriate of all means for the removal of uterine polypi, but also admits the value of excision below the ligature. All agree that even when the ligature is well placed and sufficiently tightened, much inconvenience and even some danger results from the putrefaction of the tumor prior to expulsion. This suggested the propriety of amputating the tumor below the ligature. But, granting the fact that the stalk above the ligature dies, the evil effects of putrifying animal matter are just as great when the putrid mass is small as when it is large; so that nothing is gained by the proceeding, except perhaps some diminution of the fetor. A certain number in every hundred die, when the ligature is used, and for this reason recourse was had again to excision.

In the present state of surgical practice, surgeons seem to be divided in opinion between excision and the ligature. This difference seems to be brought about by the dangers of hemorrhage on the one hand, and of the accidents depending upon the presence of putrilage on the other. Let us look into these two series of accidents to see which of the two is most formidable, and also whether it is possible to avoid both by any modification of either process, or by any new process.

The objection to excision is, that in its performance the vagina, the bladder, the rectum, and even the womb, may be wounded, and that in any event dangerous hemorrhage may result. We must not in this relation lose sight of the difference in structure, and, therefore, of the difference in vascularity, between continuous and discontinuous uterine polypi, whether simple or benign. That continuous tumors, and, above all, that malignant polypoid growths, should furnish on their incision more copious hemorrhage, accords with both reason and experience. But it is important, in the estimation of the value of excision, to remember that the great majority of polypi are benign and discontinuous. This, if correct, will explain the fact which is, I think, now put beyond all question, that excision gives rise to copious hemorrhage in but a very few cases.

Velpeau gives the preference to excision. He says he is satisfied from his own investigations, and those of M. Hervez de Chegoin, that fibrous polypi, properly so called, may be excised without the slightest inconvenience. That their pedicles never contain any large vessels; neither does he think that the hard greyish tumors, which are continuous in their mode of growth, ever give rise to any dangerous loss of blood. Dupuytren and Hervez de Chegoin, M. Villeneuve, M. Lejeune, Siebold, Mayer and Velpeau, relate a great number of cases of the excision of uterine polypi of every variety of structure, size, and position, in which not more than one in every hundred gave rise to any serious bleeding.

In regard to the manner of performing the operation, Velpeau advises that the woman should be placed in the position for lithotomy; that the tumor should be grasped with Museux's long forceps, with the hand, or with hooks, one or more, as the case may require, for the purpose of dragging the tumor so low down that its pedicle can be brought partly into sight. The pedicle is then to be cut through with knife or scissors, as may be most convenient. If the tumor cannot be made to protrude through the vulva, then curved scissors or a bistoury must be introduced into the vagina, the finger serving at once as guide and protector; The tumor is to be divided at its narrowest accessible part. If the tumor has no well defined pedicle, it will be sufficient to divide it a little above its greatest diameter. When the polypus is so large that it cannot be drawn through the vulva, Dupuytren advises an incision into the vulva or the orifice of the vagina; when the polypus is still too large to pass the vulva, that pieces of it should be sliced away, so as to reduce it to a proper size. If the tumor is contained within the womb, the os uteri must first be dilated with sponge tents; the tumor must then be seized with hooks or forceps and drawn down into the vagina, if the ergot, which should first be tried in the experiment, has failed.

Dr. A. K. Gardner (*American Med. Monthly*, July, 1859) advises that, as preparatory to grasping and drawing down an intra-uterine polypus, the os uteri should be dilated with the sponge tent. He says: "If we then find (after dilation with sponge tents) a fibrous or other form of polypus, we need have no great difficulty of twisting it off, if small, by means of torsion forceps; if larger, by passing the chains of an ecraseur around it, and thus amputating it; strangulating it by ligature, or cutting it off with bistoury or scissors."

There is some diversity of opinion as to the manner of separating tumors from the uterine wall. Ordinarily, they may be cut off with scissors or bistoury, without much regard to the hemorrhage, unless the patient is so much reduced that the slighest loss of blood is to be avoided. * * A pledget of lint, wetted in the tincture of benzoine, placed upon the cut surface, and a tampon in the vagina, will remove any danger from excessive hemorrhage. The danger of pyæmia from the absorption of the debris from the suppurative destruction of the polypus when ligatured, is avoided by the removal by incision, which is a consideration of no little importance. If the polypus be fibrous and so large as to render such operations impracticable, the body is to be seized by hooks, hooked forceps, or even with an ordinary obstetric forceps, and forcibly drawn externally and thus subjected to such operation for its removal as may be deemed advisable. The force required for thus extracting an intra-uterine polypus is so great as not only to displace the uterus from its situation, so as to bring it down upon the perineum, but it also necessarily inverts it, in order to expose the point where the pedicle unites with the uterus. Upon this pedicle being cut the uterus often returns to its natural position with an audible snap, like that made by the hollow india rubber ball of a breast-pump or syringe, when the pressure upon the sides is removed and it suddenly resumes its natural position."

Scanzoni directs that, in cases of intra-uterine polypus, the os uteri should be dilated with sponge tents, or by incisions; that the polypus be drawn as low down as possible by means of hooks, and the excision be performed with Siebold's scissors.

From what has been written above the reader will see that in cases of large polypus, treated with the ligature, it is practicable to prevent decomposition of the strangulated mass by the use of antiseptics, and to avoid hemorrhage with certainty in excision by the use of the ecraseur. Still, there is a series of cases, like Case V, in which it is impossible to draw down the polypus for the purpose of ligature; and others, as in Case IV, in which, although the tumor might be reached for the purpose of excision or the ligature, the exhaustion of the patient is already so grave that even a little hemorrhage may be fatal, and the pain and mental anxiety of a formal operation will not be without hazard. The following propositions, it seems to me, embrace the procedures which may be advisable in different sets of cases: First, in all cases procure the expulsion of the polypus into the vagina. To this end ergot, with or without sponge tents, is to be used; or, if this agent fails, the polypus should be drawn with hooks or forceps into the vagina. Second, the polypus once in the vagina, unless already dead, should be drawn through the vulva, and then cut off with the ecraseur. Third, if the polypus cannot be made to pass through the vulva, or so far into the vagina, at least, as to admit of the application of the ecraseur, then the ligature should be applied as near as practicable to the attachment of the tumor. In such cases the sulphate of zinc should be inserted into the tumor, and the vagina constantly washed with antiseptic liquors. Fourth, small and soft mucous polypi may be torn out or twisted off; if they break down in the operation, a cure will nevertheless result, but in the event of their being broken up, antiseptics are still to be used until all fetor ceases. Fifth, when the polypus has been strangulated by the contraction of the neck and lips of the uterus, the mass may be removed at once, or allowed to separate, and in all other respects treated as in the case of the application of the ligature.

Reviews.

ART. II. — *Clinical Lectures on Certain Acute Diseases.* By ROBERT BENTLY TODD, M. D., F. R. S., &c., &c. Philadelphia: Blanchard & Lea. 1860.

The first impression received from the examination of this volume is that it is not what it professes to be—Clinical Lectures. It is found upon perusal to be made up of didactic lectures, illustrated by cases observed and reported at different periods, from 1840 to 1857, and not of lectures illustrated, as all must be, to deserve the name clinical, by cases actually under observation and before the listener at the time of the delivery. Thus we find the author's opinions, as advanced in the lectures on rheumatic fever, illustrated by reference to fifteen different cases; and these cases were under observation, not at the time the lectures were being uttered, but at widely different periods. Case I, for instance, was in the hospital, April, 1848; Case II, January, 1853; Case III, September 1854; Case IV 1850; Case V, 1857; Case VI, October, 1840; Case VII and VIII, September, 1840; Case IX, 1845; Case X, 1851; Case XI, February, 1850; Case XII, April, 1855; Case XIII, October, 1844; Case XIV, June, 1844; Case XV, February, 1852. Now, we protest that no series of lectures made up from cases observed at such widely different periods can be, in any legitimate sense of the term, entitled to the appellation, clinical. The lectures on Fever, Erysipelas, Acute Inflammation, Pyemia, and Pneumonia, are interspersed in the same manner with cases in illustration, selected from the hospital records or notes of private practice, and observed at different times, covering a period of ten or more years. Now, we respectfully submit that this is very far from being in accordance even with the author's own idea of what clinical lectures should be, as conveyed in the sentence with which he commences his 11th lecture: "The purport of a clinical lecture is to bring more immediately before you the prominent points of one or more cases, which may be actually under observation, or may have been recently so. Whilst the immediate aim of this kind of instruction is to teach you the clinical history of disease by examples, it also tends to assist and direct you in making observations."

But, whilst these lectures are not, strictly speaking, clinical lectures, they are perhaps better—the matured results of a long series of careful observations from which the well stored and practiced mind of the author has been able to draw conclusions, that if true, must tend to push forward and confirm the revolution in pathological and therapeutical doctrines, which, assuming the name of "Young Physic," and receiving its first decided impulse in recent times from Sir John Forbes, has been steadily working its way against all opposition, gaining from year to year more and more upon professional confidence, until it has already nearly succeeded in wresting the sceptre from the hands of our fathers and erecting a new empire upon the ruins of their exploded dogmas. We say, if true; for if not true, these conclusions, however plausible, will soon loose their charm, and disappear in the great pool of oblivion to be seen no more. But in view of the admitted and unquestionable ability of the author, his steady industry and long devotion to the cause of science, and his rare opportunities, we are constrained to defer so far to his opinions as to give them a full investigation and a fair trial; and to do this in the spirit of true philosophy requires a mind neither wedded on the one hand to the prejudices of the past, nor enamoured on the other with the novelties of the present—a mind so anchored to the love of truth, so animated by the desire to interpret properly the mute language of nature, as to be capable of receiving with reverence the revelations of her oracles, even though they upset all its preconceptions and render nugatory and of no effect all of its previous toil. However difficult, therefore, it may be for us to abandon the mode of practice which we have followed hitherto, as we have fondly flattered ourselves with no unsatisfactory results, it becomes us, nevertheless, as true philanthropists and sincere lovers of truth, to sacrifice all pride of opinion, all the precedents and usages of the past, upon the altar of our humane profession; and to enter into the examination of new theories and new practices, which may challenge our attention by the respectability of their source, in the spirit of the precept of that greatest of nature's oracles, Lord Bacon, who tells us that the "the kingdom of man founded in the sciences can scarce be entered otherwise than the kingdom of God—that is, in the condition of little children."

Every student of medicine who has been at all watchful of the movements of the medical mind during the last quarter of a century is familiar with the fact that within this period there has occurred a very decided change of opinion in regard to the relative value of the antiphlogistic, depletory, or contra-stimulant plan of treatment on the one hand, and the stimulating or supporting plan on the other. It seems to be conceded on all sides that diseases which twenty or thirty years ago demanded the former mode of treatment are now more successfully managed by the latter; but, whilst all are agreed upon this point, there is a wide difference of opinion in regard to the modifications of theory, which the admitted propriety of this change of treatment seems to demand. On the one hand, it is maintained that there has been a change in the type of disease, so that instead of the sthenic, which was the prevailing type two hundred years since, we now encounter the asthenic as the prevailing type. On the other hand, it is contended that the change is one of science and not of disease; that the better acquaintance with the pathology of inflammatory affections has exposed the error of the antiphlogistic practice, and shown the true therapeutical requirements of these affections to be essentially the same as in the asthenic forms of disease.

Now, although this is the old controversy which we can trace back through the entire history of the profession, we propose to examine it without reference to the past, and endeavor to weigh fairly and without prejudice the claims of the two systems as they have been presented in recent times by their present champions. If we were disposed to indulge an antiquarian taste, we might begin the historical examination of this controversy with the first phlebotomist, Podalirius, the reputed son of Æsculapius, and follow it down to the days of Chrysisppus and the school of Alexandria, with Erasistratus at its head, noticing as we passed along the wars of the Dogmatists and Methodists, until we find it culminating in the fierce and protracted struggle of Galen and the Erasistrateans of Rome; which struggle, ending in the triumph of the antiphlogistic doctrines of Galen, established this as the orthodox practice till the advent of Van Helmont and his followers put the medical mind again in motion. But we prefer to consider the question as one arising *de novo*, and to be decided by the facts and arguments which have been adduced by recent investigators.

The work of Dr. Todd may be regarded as fairly representing the opinions and practice of the class of practitioners who have made themselves the especial champions of the sustaining or supporting method of treatment, and deserves therefore a candid and unprejudiced examination.

The subjects treated within the limited space of 308 pages are: Rheumatic Fever, Continued Fever, Erysipelas, Acute Inflammations, Pyemia, Pneumonia, and finally the Therapeutical action of Alcohol. Of course the literature of these various forms of disease is not dwelt upon, nor the pathology, etiology, or symptomatology, given at any length in the small compass which the author has allowed himself. Hence there is nothing novel, nor anything especially interesting to our present purpose, in the contents of the volume, except what relates to therapeutics; we shall, therefore, confine our examination to the details of treatment which are peculiar to the school which the book represents. In the preface the author has clearly stated his position, or, to use the language of the politicians, laid down the platform, and from this we extract the following as the embodiment of its doctrine:

"If one may venture a suggestion respecting the future of pathology, and of practice founded on it, it would be that a time is not far distant when all men who practice medicine in a scientific spirit, and divested of the trammels of routine, will discard the distinction of acute inflammation and acute disease in general, into *asthenic* and *sthenic*—that all these maladies will be regarded as more or less asthenic, and as promoting more or less an undue waste of tissue, and that in treatment, an object of primary importance will be the early adoption of means to uphold vital power, and the watchful and continued use of them throughout the duration of the case."

Whilst we cannot subscribe to the propriety of abandoning the use of these terms in the sense in which we have always understood them, we can nevertheless acquiesce in the soundness of the suggestion, upon the supposition that the terms are employed in the sense in which the author seems to understand them. All terms which have found their way into the language of science are in reality terms of comparison—that is, they are significant only of the relation which may subsist between certain ideas or things which are the objects of investigation. Now, when we use the terms, sthenic and asthenic, we must have some standard of comparison by which to test the degree of sthenia or asthenia. Used in the sense of the author, this standard is identical with that of health; but employed in the sense in which we have always understood them, and the sense in which we think they have generally been understood by scientific pathologists, the standard of comparison is the degree of reaction which is required to overcome or to expel from efficient relationship with the body the injurious influence upon which the morbid action depends. If we attach to the term sthenic, as applied to disease, the idea of more energy or of more vital resistance than exists in health, then unquestionably the practice which such idea suggests will, as the author maintains, oftener prove mischievous than beneficial; since it is scarcely possible in the nature of things that the body when disordered can have more power to resist depressing influences than when sound. But, if we use the term in reference to the degree of action which experience has shown to be most favorable to the work of counteracting the injurious influence, and, restoring the injured part to its normal state, then we can readily conceive that it may often happen that in efforts at resistance and restoration nature may not unfrequently react with more energy than necessary, and hence be best assisted by means which tend to moderate the violence of her struggle. And that this is the case in many acute inflammations would seem to be placed beyond question by the experience of the best observers of every period since the origin of the art. But we must not forget, that in medicine experience has too often proved upon scrutiny to be founded on the fallacious observations of some brilliant theorist, who by the boldness of his dogmatism has been able to engraft his hasty and erroneous conclusions upon the orthodox creed, and thus to transmit through succeeding centuries a really mischievous practice. Hence it will not do for us, if we would be instrumental in advancing the cause of true science, to reject new theories or novel methods of treatment simply because they are in conflict with the teachings of the past, however orthodox such teachings may have been heretofore. But, on the other hand, in view of the fact that the progress of true pathology has been so much impeded by the too ready adoption of the plausible yet crude theories of our predecessors, it might prove even more detrimental to the interest of science to receive these new theories and new methods of treatment, than to adhere to the long tried creeds of the past. When our author tells us, therefore, that—

> "There will be found in the following pages evidence enough to show that the ordinary so-called antiphlogistic treatment is unnecessary (to say the least) for the cure of acute internal inflammations; and that the supposed necessity for such treatment rested upon an untenable hypothesis respecting the nature of inflammation and of fevers, and cannot be regarded as a legitimate induction from accurately observed clinical facts—"

—the least that we can do is to examine carefully and fairly this evidence and suffer it to exert its due influence in determining the conclusions of our own minds.

Rheumatic Fever, which is the subject of the first three lectures, is briefly considered in the first in reference to its clinical history, whilst the two succeeding lectures are devoted to the consideration of its treatment. After enumerating six different methods of treating this disease—1st, by venesection; 2d, by moderate bleeding; 3d, by mercury; 4th, by colchicum and guaiacum; 5th, by opium; 6th, by sulphate of quinine in large doses—and giving reasons for rejecting them, we have the treatment by elimination presented as the plan which should be pursued in all cases. Assuming in common with all modern pathologists that rheumatic fever depends upon the presence of an acidulous compound in the blood, and that this compound is probably lactic acid, he gives, as do other writers of our day, as the indications for treatment, "to promote the action of the skin, the kidneys, and the bowels; to use antacid remedies; and to give large quantities of fluid for the free dilution of the *materies morbi*, and to supply the waste caused by the drainage from diaphoresis and diuresis." There is nothing novel in the mode of meeting these indications. Opium, nitrate of potash, and ipecacuanha, in doses of gr. 1 each of the opium and ipecac, and grs. v of the nitre, given every two, three, or four hours, according to the urgency of the symptoms, is a standing prescription with Dr. Todd. In his own language: "the opium quiets the nervous system and procures sleep, and with the ipecacuanha promotes sweating; while the nitre acts upon the kidneys, the ipecac, may exert some influence on the liver."

"The best alkali on the whole is the bicarbonate of potass, which may be given in large and often-repeated doses—a scruple or half a drachm every third hour. Sometimes the acetate of potass answers very well in similar doses, and many physicians much prefer it to any other alkaline salt.

"Next you must give purgatives to such an extent as to keep the bowels in a loose state, taking care not to carry this treatment so far as to weaken your patient, or worry him by obliging him to be frequently moved in and out of bed. You will find it advantageous to use an alkaline purgative; and there cannot be a better medicine for this purpose than our hospital nostrum—the white mixture containing magnesia and sulphate of magnesia. Sometimes you may give the potassio-tartrate of antimony with advantage; but as it is a depressing remedy it is seldom advisable to use it.

"But while we are thus alkalizing our patient, and giving internally sudorifics and diaphoretics, ought we not to attend to the state of the joints? The diligent physician will tell you by all means to attack them at once: but there is such thing as "nimium diligentiæ" in physic as well as in other matters. Many will say the best thing you can do is to leech a painful and swollen joint. I formerly tried this practice extensively, but for some time past have not done so, as I generally found it either useless or injurious. You may apply leeches, and in a short time after you will find the pain and swelling removed, and you may be disposed to say, "Here is a proof of their efficacy;" but wait twenty-four hours, and then you will generally find the pain and swelling as bad as ever, and the joint in just the same condition as before. Now apply leeches, and you will probably fail to give any relief. You have by the first application relieved the pain for a time, but you have produced no permanent good; you have rendered the disease more erratic, and less amenable to subsequent treatment. Frequently you leech a joint, the pain and swelling subside, but its fellow becomes swollen; leech it, and the swelling and pain return to the original joint. Nothing is more important to avoid, nor more troublesome if no prevented, than the erratic tendency of the rheumatic state. It will fly from joint to joint, and in pursuing it with leeches you only drive it out of one joint into another. I am satisfied that leeching the joints favors this erratic tendency.

"I am not prepared, however, to advise you to neglect the local treatment of the joints. When they are much swollen and painful, you may give great ease to your patient by enveloping them in a large quantity of the soft carded cotton—commonly called *cotton-wool.* Over this you must wrap a sheet of oiled silk, so as to cover in the wool completely, taking care to have no part of it exposed. By this air-tight covering you keep the joints in a complete vapor-bath; and when you come to remove the oiled silk and wool, after twelve or twenty-four hours, you find the wool completely saturated with moisture, which is strongly acid. You have seen this in Elizabeth Stocking's case. We find the plan so generally useful, that it is adopted in the hospital in nearly every case: it affords great relief, supports and keeps the limb steady, and at the same time promotes sweating. I may just mention, that this plan of enveloping the joint in wool and oiled silk is also very beneficial in gout.

"In a few, and only a few cases, I have found the pain aggravated by the heat which this mode of wrapping generates; and in cases where it is desirable to keep down the sweating, it is not advantageous to carry this plan beyond a day or two.

"The best additional local treatment is that by blisters of small size, applied on or near the affected joints; they are very useful both in acute rheumatic and acute gouty joints. I shall refer to this subject again. (*Vide infra.*)

"You perceive that all the means employed in this mode of treatment tend to elimination, and to the relief of pain: the opiate sudorific affecting the skin; the nitre and alkaline salts acting on the kidneys; the purgatives on the mucous membrane of the bowels; the wool and blisters on the joints.

"During this treatment, while you allow your patients the liberal use of simple diluents, you must give a fair amount of nourishment from the first; and I think this may be best supplied by a small quantity of good beef tea, given frequently throughout the day,

"Often you will find it useful, and always when there is a tendency to delirium, to give stimulants, such as brandy or wine."

When he comes to consider the inflammatory complications of rheumatic fever, as pericarditis, endocarditis, etc., we are taught to rely chiefly upon the use of sinapisms and blisters, and in explanation of their curative power, we have the following: "By blistering you take away that part of the blood which is the great agent in the development of new formations, and these are what you have to guard against in the cardiac inflammations." And then, after giving the theory of the formation of the plastic deposits, we have the following question and answer which present in a few words his view in reference to blood-letting:

"Will bleeding cut short that state of blood which is so favorable to the formation of the plastic deposits? To this I answer likewise in the negative. Among the best of the modern researches upon the relative quantities of the elements of the blood in various conditions of that fluid, are those of Becquerel and Rodier. What do these observers say as to the influence of bleeding upon the blood? Why, that it considerably diminishes the red particles, that it very much augments the proportion of water, and that it affects but little or not at all the fibrine; thus, in short, you get a thinner liquor sanguinis, holding in solution the same, or nearly the same amount of fibrine. In other words, you get a state of liquor sanguinis very favorable to transudation, and therefore very favorable to plastic formations.

"If, then, bleeding will not stop the inflammatory state which creates the undue determination of the blood to the pericardial and endocardial surfaces, and if it will not prevent the plastic formations, but rather favor them, surely it is not the remedy for pericarditis and endocarditis. And if the effects of venesection be,—as beyond all doubt they are,—to diminish all the solids of the blood but the fibrine, and to augment the water, surely the employment of this treatment is fraught with the greatest danger of creating liquid effusions into the serous and synovial sacs, which are so exposed to the action of the rheumatic matter."

After these quotations we need no further evidence of the author's settled aversion to the use of every form of blood-letting, and as we follow him through the remaining lectures we find this evidence becoming stronger and stronger till it attains its culmination in such passages as the following:

And this, in truth, seems to me to be but the plain and simple fact;—you must feed inflammations as you would other active vital processes. You must, that is, feed them to prevent them from extending to, and preying on, healthy organic structures, and committing great destruction Bear in mind, too, that you cannot stop an inflammation so long as the exciting cause of irritation is inherent in the inflamed part; you cannot cure an inflamed sore eye so long as the irritating particle of dust remains adherent to it. It is wise policy, then, to try and gain time, until by antidotal means, or by elimination, you can get rid of the local irritation, whatever that may be." (p. 172.)

"Alcohol may be employed in all those diseases in which a *tendency* to depression of the vital powers exists; and there are no acute diseases in which this lowering tendency is not present. Many such maladies will, doubtless, get well without the interference of art; cases of pneumonia, and of fever, for example, will frequently recover without the employment of any medicines. But take any case of pneumonia thus left to follow its own course, and after eight or ten days you will always find your patient more or less emaciated, and in a much more prostrate condition than on the accession of the malady. If, however, in such a case tartar emetic had been exhibited, or bloodletting practised, how much more depressed will be his condition! Hence the great importance of upholding your patient's powers while the natural processes of the disease are taking place. In pneumonia a peculiar effusion occurs into the air-cells, which after a while become filled, the lung itself becoming dense and solid. For the recovery of the patient all this effusion has to be absorbed, and the air cells restored to their original condition. The processes which nature has to perform in the cure of this disease are highly complicated, and no one,

> I apprehend, will assert that we possess any drug which by its direct agency on the system can effect this object. In the accomplishment of these changes there is a considerable expenditure, as it were, of nervous force and of blood; and therefore, we should supply to the system a kind of food which, while it is easily assimilable, is at the same time capable of upholding the nervous power, and of maintaining the animal heat. And such a food is alcohol, which, as I have already pointed out, is assimilated in the easiest manner by a simple process of endosmosis, exercises a peculiar influence on the nutrition of the nervous system, and by its combination with oxygen in the body, supplies fuel for the maintenance of the animal temperature. When given in too large a quantity, alcohol passes out of the body unchanged in the air expired from the lungs; but when its amount is limited and proportionate to the real wants of the system, it is evolved in the form of carbonic acid and water, and promotes the secretions of the lung, the skin, and the kidneys." (Pp. 293, 294.)

Thus we find that according to the clinical experience of our author the entrre antiphlogistic system should be abandoned, and in its stead treatment by sudorifics, diuretics, gentle cathartics, anodynes, antidotes, stimulants, and nutrients, be exclusively adopted.

Whilst we cheerfully receive these lectures as a valuable contribution to rational therapeutics, we confess that we are not prepared to accept the whole doctrine of the author; for whilst he challenges the approval of every scientific pathologist by the pains which he takes to make out a sufficient reason, based upon scientific pathology, for the practical precepts which he inculcates, we must hesitate in the present state of the science before we receive fully either the new pathology or the practice which it seems to require. We are disposed to agree with the author that the types of disease are essentially now what they have always been, and hence that the admitted propriety of the partial abandonment of the antiphlogistic treatment in recent times, is not to be justified by the assumption that there is a stronger tendency to asthenia now, than during the palmy days of the lancet and the leech. But, on the other hand, we do not admit the soundness of the doctrine that in inflammatory affections the inroads of the morbid process upon the adjacent tissues is to be prevented or arrested by supplying through the blood the material for it to feed upon. This smacks rather too much of the old ontological or parasitic doctrine of Paracelsus, since it is only upon this hypothesis that we can understand the author's idea of feeding the disease to keep it from feeding on the body. His idea, that the process of cell formation is going on so rapidly in the inflamed part as to impoverish the blood by draughts upon its plastic elements, is entirely irreconcilable with the admitted increase in its proportion of fibrin, which is generally regarded as the most highly plastic of all its elements. True, there is some difference of opinion amongst pathologists in reference to the relation of this element to the histogenetic process, but certainly the weight of authority is in favor of the view which makes it the chief agent in the process of tissue development, and to this view our author seems to give his full sanction. But whether we adopt one or the other of the two principal explanations of the presence of the increased proportion of fibrin in the blood during the existence of active inflammation, we are alike unable to harmonise the admitted fact with this theory of our author, which makes alcohol and beef tea necessary in the active forms of inflammation. If, as is contended by some pathologists, this increase in the quantity of fibrin depends upon the more rapid oxidation of the albumen which results from the hurried respiration and circulation accompanying inflammatory excitement, then certainly there can be no need of such stimulating treatment as must increase the difficulty. If, on the contrary, the accumulation of this element is due to the fact, was maintained by Lehmann, that the respiration of inflammatory excitement though hurried, is yet so shallow as to lessen the absorption of oxygen and thus cut off the supply which is required to fix the fibrin in its appropriate tissues—or, in other terms, to accomplish the process of secondary assimilation or histogenesis—it is equally difficult to understand how alcohol or beef tea can supply the deficiency. But if we adopt the view held by a few pathologists of our day, that fibrin is a product of the histolytic process, or what Prout calls destructive assimilation, and that its accumulation in inflammation is connected with a more rapid disintegration of tissue, we can easily conceive that this rapid disintegration may coexist with such draught upon the blood plasma for the purposes of cell growth in the inflamed part as to make the supporting treatment necessary and proper. But as this view of the source of fibrine is not in accordance with the best authorities, and especially as it is not the view of our author himself, it will not do to make it the basis of support for the theory in question.

The stimulating or supporting practice which he recommends in inflammatory affections not being in harmony with the generally received opinion in regard to the sources of the accumulation of fibrin in the blood, which always occurs in these affections, the question of the propriety of the practice becomes a mere question of fact, to be tested only by observation and experiment. And it must be admitted that as yet the experience by which it is supported is too brief, and limited to too few observers, to justify us in giving it our sanction or approval. On the other hand, the antiphlogistic treatment, upon the ruins of which this new practice is to be installed, rests upon the experience of many men and many ages, and challenges our respect, not only by its age, and the many admirable observers by whom it is endorsed, but also by its strict conformity with the pathological doctrines now generally accepted touching the state of the tissues involved in the inflammatory process, as well as the coexisting condition of the blood.

The entire question of the antiphlogistic regimen and treatment needs careful revision in the light of modern improvements in physiology and pathology; but as the subject is altogether too extensive for our present space we must defer its consideration to another time.

ART. III.—*Transactions of the American Medical Association.* Instituted 1847. Vol. XII. Philadelphia: Printed for the Association. 1859.

We resume our notice of the *Transactions* from the previous number of the Journal.

It was our intention on taking up the volume to go through it regularly from A to ampersand, but for several reasons we shall not be able to do this. We pass over, then, the "Report on the Epidemics of California," with the remark simply that it contains some statements which seem to support the old notion of malaria's arising from the conjunction of heat and water under certain circumstances—a notion which Prof. BOWLING, of the Nashville University, stoutly maintains; we pass over, also, the "Report on the Registration of Births, Marriages, and Deaths"—marked, as it is, with the usual good sense of the Chairman, Dr. W. L. SUTTON; and, finally, we pass over the "Report on the Epidemics of Michigan," which is slovenly in its composition, a little more so than the California Report, but in this particular it only comports with the general character of the book—it is in keeping, as artists say. 'Much yet remains'—and, oh! *so* heavy—viz: a paper of four hundred pages of text, references, and notes, two pages of contents, and ten pages, double columns, brevier, of index—entitled, "Observations on some of the Physical, Chemical, Physiological, and Pathological Phenomena of Malarial Fever," by JOSEPH JONES, M. D., Professor of Medical Chemistry in the Medical College of Georgia, at Augusta.

"Si quantum"—we have been saying to ourselves all along, as we approached this paper—

> Si quantum cuperem, possemquoque;

ay, indeed, but there it is—

> —— sed nec meus audet
> Rem tentare pudor, cum vires ferre recusent.

Yes, in spite of ourselves, we *refused*—we sank down in utter helplessness and in despair! But, from the depths of this despair, looking, as is our wont, up to the dark vault above us, up to the keen stars, these shot strength into our hearts; for, lo!

> —— the mighty Lumina, by no
> Maleficus affronted!

Ah, such a galaxy! such as would have gladdened the heart of old astrologer: Jupiter, 'the lustrous,' in his highest glory; Sirius; Capella; Castor and Pollux; Procyan; Aldebaran; the Pleiades; Orion, with his belts, unrivalled; and, there,

> —— he farthest from you,
> Spiteful, and cold, an old man melancholy,
> With bent and yellow forehead, he is Saturn!
>
> * * * *
>
> Innocuous, powerless, in cadente domo!

We have gathered strength, then, from these—from 'their blessed influences and sweet aspects;' and so let us

> — hasten on to action, ere
> The scheme, and most auspicious posture,
> Parts o'er our head, and takes once more its flight;
> For the heavens journey still, and sojourn not!

Chapter I., opens in this wise:

> The object of this chapter is to sketch the mutual relations of celestial and terrestial bodies and animated beings, and demonstrate—that the existence of man is absolutely dependent upon the relations of the component members of the universe—that a single alteration in the chain of phenomena would destroy the conditions necessary for the existence and manifestation of the phenomena of man—that the forces of man are all resultants of the forces of the sun and fixed stars, which keep up a never ending circulation and change of matter upon the surface of our globe—that man cannot create or annihalate force any more than he can create or annihilate matter—that the great law of the Indestructibility of Force, of Action, and Reaction, applies to all the phenomena of man—that man is a type of the universe, and comprehends within himself all phenomena, astronomical, physical, chemical, physiological, and psychological—that the knowledge of the structure, phenomena, and relation of man includes a knowledge of all science, whether relating to matter or mind. The end of the whole investigation will be the establishment of the true character and extent of physiological and pathological investigations.
>
> In this inquiry we will examine first the general or simple phenomena, and lastly the particular or comlex.

And here is something to the same purport, reduced, as it were, to its simplest expression, and formulized:

> "General phenomena are wholly independent of the particular or complicated; whilst the particular or complicated are dependent upon the general, and cannot exist without them. Thus, we cannot conceive of matter without weight, but we do conceive and know of the existence of matter in a state of perfect freedom from the manifestation of physiological phenomena. It is evident that if we wish to understand the complex phenomena, we must analyze the component phenomena, and examine first the most general, which form the foundations of the existence and manifestation of the restricted or complex.

And here the author mounts *in alto* at once:

> Man stands upon the summit of a pyramid, the foundation of which is the inorganic world, and the materials composing this pyramid consist: first, of plants in various stages of developement, the simple extending downwards, the more complicated extending upwards, diminishing in numbers as they increase in complexity; and, secondly, of animals in various stages of development, increasing in complexity and diminishing in numbers as they extend upward. To understand the physical and physiological constitution of man, we must commence at the base of the pyramid and examine successively all the elements, with their properties, forces, and constitution—we must examine the relations of the individual elements to each other and to the universe."

Thus we see that, for Jones,

> "This visible nature, and this common world,
> Is all too narrow."

So he plunges at once into astronomical phenomena—discusses gravity, 'the implicated orbits woven of the wide-wandering stars,' especially binary stars, the march of the sun around an unknown centre; quotes Herschel, Otto Struve, Encke and Galle, Madler, Mitchell, Nichol, Arago, Argelander, Humboldt, "and several other astronomers;" gives us the number of double stars "with some certainty" as six thousand, of which the orbits of sixteen are known; and finally winds up with a little talk about cohesion.

But don't think that this is all, reader! He comes down next, to our solar system, and makes the wonderful announcement that "its present state depends absolutely upon the mutual relations of its component parts;" and that its perturbations need excite no apprehension, as "the sublime discoveries of Lagrange and Laplace" have shown that they are merely proofs of stability—just as exceptions to a rule, prove the rule—that they arise, in fact, out of the eternal laws which govern the system; so that if a perturbation takes place here, one takes place yonder, to counterbalance it—and thus, as a military friend of ours, Capt. Osborne, used to phraze it, 'the evolution is brought into a concert!' Well, this is comforting! But there are more comforts in store. He says that "the order and harmony of our system give unmistakable evidence of one great omnipotent mind;" that "the plan of each planet is the type of the whole system;" and then, with the help of Chalmers, Brewster, and the Rev. Baden Powell, he settles it, satisfactorily to himself, that "the members of the solar system are inhabited by beings, which, probably, from the very arrangements themselves, are analogous to those inhabiting our globe." But, most wonderful of all, "if they be inhabited by similar beings, the existence of these inhabitants must depend absolutely upon the mutual relations of the component members of the system"—just as if any body supposed that their existence could depend upon the relations peculiar or belonging to any other system!

Then he considers the "relations of the organized beings inhabiting our globe to the size, density, and structure of the latter, and to its relations with the sun and other members of our system;" discusses the relations of the moon, the states of matter solid, fluid, and gaseous, the heat supplied by the sun and fixed stars; explains geological changes by heat of the fixed stars and the movement of the system through space; tells about land and sea breezes, and other motions of the atmosphere; about latent heat, action and reaction, and indestructibility of force; and expresses in horse power the force of the sun's heat in evaporation, and compares it with the combined horse-powers of all the steam-engines of the world—which it beats all to pieces, of course. We can suggest another comparison, viz: Arkansas "chills;" each of which, according to a veracious correspondent, ranges "from five to seven hundred horse powers." Such a comparison would have the inestimable advantage of bearing slightly upon the title or the supposed objects of this paper, which the reader is in danger of forgetting. Taking the mechanical power of the waters flowing in the rivers of the earth as an exponent of the power which raised and transported them from the ocean, he tells us that the power of Niagara alone, in its cataracts and falls, is greater than that of all the steam engines in the world; but, he adds, doubtless lest these cataracts and falls might be taking airs on themselves, that the Niagara "is only a modest, medium-sized river"—what is called, we suppose, a mere circumstance, "in comparison with the Mississippi, the Yenisei, the Yang-Tse, the Hoan-Ho," and many others." He speaks of "our globe" as having been, "in its early history" a molten mass, which on cooling presented "nothing but rocks and water," "studded with volcanoes and lofty rocks" (*sic*); and these, it was the province of the water and air, moved by the forces of the sun, to render habitable for plants and animals—and that the water and air did it.

Now we come to some remarkable things. Here he labors through a paragraph, and by a desperate effort succeeds in getting to the point whence he set out:

> The immense mountain ranges and table lands, which influence, to a great extent, the climate of continents, and exert an effect upon the structure, and growth, and distribution of plants and animals, and determine, in a great measure, the habits, occupations, and diseases of man, have all been elevated by those forces, which rocked our earth in its cradle, raised up the mountains, brought low the vallews, heaved up immense continents, and divided the sea from the main land.

"To the superficial observer," he says, in the succeeding paragraph, "the great strife between the forces of heat and gravitation"—such as "blazing volcanoes," "belching forth," and "deluging"—"earthquakes," "rocking," and "fracturing," and "rolling up," and "heaving up," and "removing," and "plunging"—"would appear to be under the guidance only of blind, mad fate, chained and struggling in the fiery bowels of the earth." Yet he adds immediately, and considerately, lest this superficial observer might fear this blind, mad fellow would go to 'breaking chains and things,' and, what with his blazing volcanoes, belching forth and deluging, his earthquakes rocking and fracturing and rolling, just *spiflicate* everything—he adds, we say, that "this fiery strife is under the guidance of an intelligence who (*sic*) brings unity out of diversity and discord, harmony and order out of contending forces and elements, life and fertility out of fire and destruction." Which, we say, cannot be done—which never has been done—which never will be done! And if this "superficial observer" has no other resource, no other dependence, no other refuge, he is gone, he is done for—it is all over with him! Unity out of diversity and discord, forsooth! No, sir! Not the combined horse-powers of the Arkansas chills, of all the steam engines in the world, of all the rivers on the earth, and of those

—— living winds, that flow
Like waves above the living waves below;

not the forces of the sun and fixed stars; not the "physical, chemical, vital, muscular, and nervous forces" "in the little world of man" (including the "great force," endosmose); not the intelligence of man, angels, and gods, not even that of Prof. Jones, (and here we culminate)—not these, aggregated and massed into one gigantic, transcendant, and tremendous horse-power and intelligence, or horse-power intelligence, or intelligent horse-power, could do it. No, sir! It is not in accordance with what Parson Square calls 'the eternal fitness of things'—not at all! And we must beg that henceforth you will not insist—well, we will not get excited; but we—we wish it to be understood that we are thoroughly in earnest in this matter!

Let us go on, however: In the very next sentence, "every earthquake" that "has fractured and dislocated," "elevated" or "depressed"—"every volcano" that "has poured forth"—"every flood which has swept over ancient continents" (which must be what Caleb Cushing calls a *cataclysm*)—every one of these, "has contributed more or less to the formation of a suitable soil for the maintenance of plants and animals, and the development of the human race:" which makes another circle, brings us round to where we were two pages since—'brings the evolution into a concert,' again!

Then follows a paragraph which is almost as new as it is brief; it has absolutely staggered us, and will stagger a great many people:

> The forms, arrangements, and distributions of the terrestrial masses, although the results of the action of the forces of heat and gravitation, reveal a great design.

And this—which is the next in order—is only a little less staggering, possibly because it is a little more diffuse:

> Every form of matter is definitely related to every other form of matter upon the face of the globe; and the combination of these various relations, and actions, and reactions of terrestrial masses form the essential condition for the manifestation of the great designs of the Creator.

And then he tells us: "It is a universal law that all the component parts of the universe do not have in themselves the entire aim or reason of their existence,"—from which may we conclude that some of them do have?

"The history of nations," we are told, "has been in great measure determined by the agency of heat and gravity upon matter"—that is, "the physical and mental developement of the different races of mankind has depended, in great measure, upon the solid and fluid portions of our globe"—which is the same, but with a decided difference; and, moreover, we wish to ask Jones, and Guyot, by whom he is underborne, if it would be possible to predict this "history" by studying the agency of "heat and gravity," or to predict the physical and mental development of a race by studying the solid and fluid portions of the globe? We trow not; such things have only been discovered *a posteriori*, and are to be slightly distrusted. Dr. Jones informs us next that all "forms of water, rocks, and minerals, plants and animals of all colors and shapes" (and sizes, we suppose), result from "sixty-two simple bodies, which cannot be resolved into other elements"—which is downright obstinacy, for of course there are simple bodies that can be thus resolved. Then he gives us the three great fundamental laws of motion established by Kepler, Galileo, and Newton, and says that though applied by these worthies "to mechanical motions alone" they "are applicable to all the motions and forces, astronomical and terrestrial, of the masses or atoms of inanimate and animate bodies;" and that "the establishment of this * * is necessarily followed by the admission that, as far as the powers of finite beings extend, force is indestructible"—which is a good thing, seeing what a tumultuary population (according to Santa Anna) we have in this valley, and seeing that without such "conservation of force the universe would not be maintained in its present condition"—and so we should all be destroyed again!

But let us get on faster, ere the 'slily malicious Mars' with 'beam oblique' disturb our starry influences. We pass over, then, "the history of the correlation of the physical forces"—which starts with the lever of Archimides, and a period fifty-one lines in length, full of epicycles, em dashes, patronymics, and other devilish enginery, extends rove ten pages, and includes everybody that has mentioned such a thing as correlation, directly or indirectly, (except lexicographers)—and come to this: "Organized bodies are composed of inorganic elements and are governed by all the laws and phenomena of inorganic bodies, and are absolutely dependent for their existence upon inorganic bodies." Then we are told that "to understand the phenomena of living beings" (which are of the "restricted and complex") "and their relations with the universe, we must comprehend the phenomena and relations of all inorganic bodies." So, water being the great agent of change in the organic as in the inorganic, we are plunged into a terrific calculation of the quantity required by plants and animals for this thing of being alive, and of the amount of oxygen consumed by plants and animals for the same trifling thing, besides that entering into the constitution of the water aforesaid. Next we are informed that the absence of a single inorganic constituent—such as a little lime, soda, potassa, silica, or iron—from the food of man and the higher animals, would be followed by death. And so many of the "sixty-two simple bodies," which we saw a little while ago, are poisons, such a close relation exists between the mineral constituents of man and animals, and the constituents of the crust of the globe, that if the latter were altered in quantity, distribution, or quality, we should again all be destroyed. And now we are asked triumphantly:

> What would have been the result if arsenic had been as widely distributed as iron? What would have been the result if the chlorine of the sea-water and crust of our globe had been united with mercury instead of with sodium?

Well, it is dreadful to think of! Now that we do think of it, though, it really seems to us that if arsenic were distributed in this way instead of iron, it would be iron—and conversely; that if mercury were to take the place of sodium, it would be sodium—and conversely; and where would be the trouble then? Why it is just the dream of the old alchemists, about transmutation, realized. But suppose that arsenic is arsenic, although behaving itself like iron? In that case couldn't each of us become a Mithridates (without a *myth*), and feed on arsenic, and grow fat, and saucy, too? Or might not such a "pertubation" as would lead to this deposition of arsenic, have a compensating one, giving us any reasonable quantity of per-oxide of iron, to be *hydrated* by some of the "1,500 billion pounds of water" rushing through our blessed bodies, thus antidoting the bane, and making our faces glow as heaven's face doth glow? So of the mercury—if it is mercury, would the public mind be so much agonized about the Almaden quicksilver mines? And would not these Calafornia and Carson valley creatures that dig gold, these Humboldt and Frazer River fellows, these pioneers at Jones's Peak—or, rather Pike's, for Jones's is "a pyramid" —would not these rejoice greatly, seeing how "restricted" they are by "the scarcity" of this very substance? Why Jones tells us that "the very scarcity," not to speak of the "poisonous properties of these substances," has "exerted great influences upon the development of certain arts and sciences"—which is just what we are speaking about! If it comes to supposing, we can suppose a great many unfortunate things. Thus: suppose we had all been born without lungs? what would become of those eight hundred billion pounds of oxygen annually consumed by us? Or without brains? and the serious consequences of this we can see every day. Or, to take something less violent, suppose that women had all been born males—which would have required, on the part of the "vital force," a little trick only, such as would hardly "destroy the great law on which the universe depends," but—wouldn't it have been dreadful? Or suppose that men had all been born females; wouldn't it have been dreadfuller—especially for the females? You see, reader, there might have been a great many things worse than the distribution of arsenic for iron.

But let us on again. "The developement of a definite form from a formless mass," Dr. Jones tells us, "and the preservation of that form amidst unceasing chemical and physical changes, is the great characteristic of organized beings;" and this is effected by means of what our author calls "vital force," to the description of which five pages are devoted, making it about as clear in the end as at the beginning. His idea of a vital force is Liebig's, and we suppose it is such as all these chemists entertain; it is a sort of wheel within a wheel, a circle in a circle, an intelligence within the intelligence—thus, he asks:

> If the vital force be not analagous to intelligence, how does it come that all the organs and apparatus are developed upon a definite plan, adapted by structure and conformation to the medium in which the animal lives, and to all the physical forces?

With this we are at the end of this first chapter. What does it all amount to? First here is what it involves:

> *As the germination and development of vegetables and animals, and the maintenance of their life actions, depend essentially upon the properties of matter, upon the relation of matter to the sun and fixed stars, and upon the correlation of the vital, chemical, and physical forces, it is evident that the study of complicated, highly developed plants and animals involves the consideration of their origin, development, structure, and relations to exterior bodies—involves the consideration of the chemical and physical properties of the elements, and combination of elements entering into their constitution, and the relations of the constitutents of their bodies to the surrounding medium—involve the considerations of the relations of the vital, chemical, and physical forces, and intellectual and moral faculties—involves the consideration of the relations of animated beings to the forces and arrangements of the sun, and planets, and fixed stars.*

And now "in one vast magnificent generalization," or "general view" (it is all the same!) here is what Jones and ourselves have been working up to, through forty pages—but stop! Reader, have you ever seen a *spirometer?* We don't mean those affairs that go travelling about the streets; we mean a real one. Five years ago, this grass, we saw one, belonging to a scientific friend, and we came within an ace of blowing it up, of ruining it, we sent the index up so fast and so far—we have a tremendous capacity of lung; but this sentence, like the one we gave the go-by to, and like some which we will come to by and by, beats us entirely! To it:

> An examination of the origin, development, structure, and relations of all vegetables and animals, commencing with the simplest, and ending

with the most complicated, leads us to the summit of the pyramid upon which stands man—governed by all the astronomical and chemical and physical laws of inorganic bodies, and comprehending within himself all organic nature—arising in common with plants and animals, from the organic cell, and like them, passing through various stages of development—endowed in common with all vegetables and animals, with vital force—possessing in common with all animals, and in contradistinction to vegetables, a nervous system endowed with special sensibilities, relating the intellectual faculties to the exterior world, and relating the various organs and apparatus to each other, in such a manner that, amidst an innumerable number of complex actions, unity and harmony result—an organism composed of inorganic elements, prepared and grouped into definite compounds in the vegetable kingdom, by the combined actions of the vital principle, and the physical and chemical forces of matter and the sun; perfect in its mechanical structure, and in the arrangement of its parts, with the size of its organs, the strength of its muscles and bones, and the vigor of its forces, constructed and arranged with exact reference to the force of gravity, the size of our globe, and its relations with the sun, and all other worlds in the universe—worked by forces, always the resultants of the chemical changes of those substances which, in the vegetable kingdom, have been elevated into a state of force, by the action of the sun upon matter in the vegetable laboratory—worked by forces to which the great laws of mechanics apply—possessing intellectual faculties, capable of receiving impressions from the motions of exterior bodies, and of exciting the forces by which they are surrounded, and directing them so as to act upon exterior matter, and overcome all the barriers and obstacles of nature, not by a suspension or alteration of her laws, but by peculiar applications of those forces and laws—endowed with moral faculties which distinguish him from every other form of matter, and every other being upon our globe—revolving with the earth and planets around the sun, and with the whole system, moving through the great ocean of space, around a distant unknown centre—with an existence like that of plants and animals dependent upon the length of the day and of the year, and of the seasons, which are dependent upon the adjustments of the solar system; dependent upon the constitution of terrestrial bodies, and their relations with celestial bodies.

Man, then, is a type of the universe.

If a single one of the nice adjustments and relations of the component members of the solar system were materially altered, or even if the relations of the solar system with the exterior universe were materially altered, derangement of the structures, and final destruction of the human race must follow.

To understand the phenomena of man in health and in disease, and *his relations to the universe, we must comprehend the phenomena and mutual relations of all animate and inanimate bodies, terrestrial and celestial.*

We have now reached Chapter II, which treats of "the extent, object, and imperfections of pathological investigations."

The problem of the healthy man is certainly complicated enough, but we shall see that when disease comes in and sets all these "phenomena" at six and sevens—why, it is appalling, truly! It disposes us strongly to believe in Rush's notion of the unity of disease, just to cheat ourselves, to get rid, if possible, of some of these infernal complexities; though, now that we think of it, this would not help us much, seeing that this unit, if it be one, is so proteanly, that it has such a Charles Matthews like facility and power of disguise. We should be puzzled all the same; so we will not try to mend matters this way—we will look them steadily and sternly in the face.

What these complexities are, we are told in this second chapter, where Jones sums up a good many of them for us, but before doing so he gives us twenty pages on the nervous system, including its literature, from Rufus Ephesus to Plempius, from Plempius to Bidloo, and from Bidloo to Brown-Sequard, "and many others." The text has a trying time in this chapter: here it dwindles down to two lines, and there is completely lost; and then we come to four blessed lines, islanded in a sea of quotations, encintured by them, midway, around—quotations everywhere and not a bit of text. And what are these quotations? Why chiefly Le Gallois, and Fred. Lobstein, and, goodness gracious! Samuel Jackson's *Principles of Medicine*, a book which has not been heard of for twenty-eight years, but which, now that Charles Caldwell is no more, that his terrible pen sleeps quietly in the grave, is thus stealing its way cautiously to the light in these "Observations!"

But here are some of the *demands* of this second chapter:

It is evident, then, that the complete investigation of the origin, causes, effects, and treatment of disease demands an examination of the relations of man, during health and disease, to astronomical phenomena; demands an examination of the relations of man to the distribution of the terrestrial masses, to the soil, climate, and waters, not only at the present time, but in the past history of the relations of man to astronomical and terrestrial phenomena; demands an examination of the structure and relations and alterations of the solids and fluids of all the organs and systems of organs, and apparatuses, and tissues, and blood, and secretions, and excretions; demands an examination of all the physical and chemical changes, and the relations of the physical, chemical, vital, and nervous forces; demands an examination of the relations of the physiological and pathological alterations of the nervous system to secretion, excretion, sensation, motion, and intellectual and moral actions.

Nor is this all. When a body of healthy seamen are exposed on the same ship to the same malarious influences, and afterward furnish every form of fever, from the mildest to the most malignant—"whence this difference?"

The difficulty and complexity of this problem, arising about a handful of mariners, may be comprehended when we state that, amongst many other things, its solution would demand a knowledge of the previous history of the physical, chemical, physiological, and moral influences of soil, climate, and disease upon the ancestors, and even upon the races; would demand a knowledge of all hereditary tendencies, peculiarities of temperament, and idiosyncracy; would demand a knowledge of the relative activity and perfection of the individual organs and apparatus, and of the relations of these to each other; would demand a knowledge of the relations of the vital force to the matter of each organ and tissue and apparatus, and to the morbific agent or agents; would demand a knowledge of the action and reaction of the morbific matter upon the different forms of organized structure, and the consequent derangement of the physical, nervous, intellectual, and moral phenomena; would demand a knowledge of the relations of chemical action to the development of the physical and nervous forces, and the action of the intellectual and moral faculties; would demand a knowledge of the correlations of the physical, vital, nervous, intellectual, and moral phenomena; would demand a knowledge of the relations between physiological phenomena and the phenomena of the exterior universe. And then we are informed: "Every candid man will admit that the solution of such a problem is impossible at the present time, because the facts are wanting; and they will long be wanting, owing to the extreme complexity of the phenomena." We should think so, in reference to both clauses.

We have now reached the third chapter, which is devoted to "the blood;" and at the last of thirteen pages, we are a little wiser than at the first, in that we know that nothing is yet known certainly about the blood.

Beyond these thirteen pages extend three hundred, divided unequally into three chapters, the contents of which give title to this paper. We find nothing that is new here. It is simply a chemist's view of malarial fever—and it is to be commended in this, that the author does not attempt so much to teach any thing new, as to explain the old. That, we take it, is the province of chemistry in medicine, at least yet a while—we distrust it when it goes beyond this. To be sure, the author seems to insist on several things, as though new to him, which are as old as any respectable treatise on malaria. His malarial cachexy, we think is not very new. His assurance that purging will not be borne, with a dry, red, rough tongue, is about as old as disease. His discovery that congestion and pain of head and delirium are to be treated with quinine and stimulants, and that they will subside under these, is not new either, nor is it always true; and it is remarkable that in nearly every case which he gives to support this notion, cups to temples and back of head largely, and blisters frequently, were employed—wherein his practice is a great deal better that his theory. He thinks many patients die of heart clots—but, if this is so, it is not peculiar to malarial fever, even allowing that the fibrin is, as he thinks, altered in quantity and quality. Heart clots, evidently formed ante-mortem, are found where there could have been no such alteration; they are found when the quantity of fibrine is increased, and when it is diminished—with a diminished as well as an increased coagulability. They are found in poisoning by tobacco, in drunkenness, in poisoning by *salts of ammonia*, which last Dr. Jones urges upon the reader as a remedy, in paragraph after paragraph, although he does not believe with Richardson that it is ammonia which holds the fibrin in solution.

For the rest, here are tabular statements of the urine, of the pulse, of the blood in all sorts of diseases, of respiration, of temperature, of the symptoms in three hundred cases of fever, and of many other things. The book indeed is as remarkable for what does not relate to malarial fever as for what does. Here is every thing from the expansion of a metal wire by heat, to infusoria in "brash ice" from the Arctic regions; from the mud of the spleen to the mud of the Ganges; from the temperature of the insane to that of space; from cellulose in the leathery mantle of the cynthiæ to the relations of moon to plants and animals; from chitin in the animal kingdom to the distance of a star of the ninth magnitude from the solar system! Here is every thing which has no business here—much of the exterior universe, indeed; while every thing that has business here could be placed in one hundred pages! And the paper seems to us to have been written not so much on account of malarial fever, as on account of that which is not malarial fever.

It would be a curious inquiry, how this paper got into the *Transactions*. First it goes to the committe on voluntary essays (reader, think of a voluntary four hundred pages long, with an index vocabulorum of twenty double-columns!); then the author gives a verbal abstract to the Association; then it is referred to the committee of Publication; then it is transferred by the Association to the committee on Prize Essays (gentlemen, you found your match here in the way of rhetoric!); and this is the last seen of it until it appears in print, full-orbed, and filling the firmament of this volume. Did the committee on Voluntary Essays read it? Was Dr. Jones's abstract such as to give the Association any proper and adequate idea of it? Did the committee of Publication read it? Did the committee on Prize Essays read it? Has anybody ever read it save that unfortunate man, the "proof" reader? Did Dr. Jones himself ever read it before it went into print? To all these questions we take it upon ourselves to answer—No!

If Dr. Jones wishes to write on the relations of man to the universe, on the correlation of physical forces, or on any thing of this sort, let him get up a distinct treatise, and not lug such things into observations on malarial fever. And moreover let him be content with publishing them once. Here in this paper we have a good deal of that which has already been published in the Smithsonian contributions, and something, if we mistake not, of that which first saw the light in other quarters. Now when Dr. Jones writes a paper, must it contain more or less of all the papers which he has written? It would really seem so; for, lying near us. is Dr. Jones's introductory address on "Medical Education," delivered last November, which contains sentence after sentence, and page after page, identical with sentences and pages in these "Observations"—just as every chapter of the latter contains passages and pages which have done duty, perhaps more than once, in preceding chapters, or will do it in succeeding chapters. Is he to repeat himself constantly in this manner? To be sure, as these "Observations" comprehend the universe, we do not see how he can do otherwise, how he can get away from them or himself. In that case, let him copy nature with her variety in unity—let him present himself, as it were, now as caloric, now as electricity, now as some form of chemical action; or, if he be not equal to that, let him copy what he learned from the first line of his Ovid, hypallage and all, and *in nova mutaatas dicere formas corpora.*

Dr. Jones flatters himself that he has shown the impossibility of one man's investigating successfully even the most striking phenomena of disease. O, yes! But in his effort to do this he has done a great deal more—he has shown that it is impossible for any number of individuals, even "acting in concert." For supposing a number of individuals to have the universal knowledge which he says is demanded, (and we do not believe any body has or ever will have, not excepting Dr. Jones), suppose they have this as a starting point, how long would they agree? and where is the criterium, when they disagree? how are we to tell if one is right or wrong? As our minds are "the reflection of the image of the Creator—who is himself Truth," we are certain, says Dr. Jones, to arrive at truth if we reason in accordance with the structure of our minds. But how are we to know when we do thus reason? Where is the standard?

Manifestly, Dr. Jones's idea is simply this, that to understand any one thing we must understand every other thing—which is something more than an absurdity. But somehow such notions belong to these chemists. As to a cobbler there is nothing like leather, so to a chemist there is nothing like chemistry, and, indeed, nothing in the world but chemistry. It is all something in *ic*, or *ate*, or *ous*, or *ide*, or *en*, or *in*, or *ia*—or if it is not some of these, it is *catalysis!* And what is that, you ask, reader? Why when your cook mixes some yeast with her dough, the former changes the starch of the latter into sugar—which is *not* catalysis, as we understand it; but straightway the sugar, by the mere presence of the yeast, incontinently becomes carbonic acid on the one hand and alcohol on the other—and this *is* catalysis, quite as useful in chemistry as it is in cookery, or kitchen, and in brewery.

We may fix it in your memory by its analogue "in the little world of man," by *moral* catalysis. You come to Louisville, as it may be, and, if you are young, you and your friends wind up an evening in a way which will be suggested to you by the words, "champagne supper." So you get on the street, on your way home, with an idea that the street, and every thing on the street, belongs to you, and that you have the right and the power to do just as you—please. Very well. Ere you are aware of it, and while you are in the very torrent, tempest, and (as we may say) whirlwind of this idea, KIRKPATRICK* comes along—a quiet man, not large, who looks at you with a level-fronted eyelid, and a clear, unclouded eye, and with an expression of unmistakable firmness, decision, and resolution on his face. Perhaps he does not speak a word, beyond a courteous salutation, and may be not that; but straightway and incontinently you behave yourself, and go to your hotel. You don't turn yourself into carbonic acid and alcohol—for, you see, these have been turned into you with the champagne; but you are freed from your wild notions, and—you go home! Now this is catalysis, moral catalysis. Kirkpatrick is a catalytic agent, he has catalytic force—and force of another kind, when needed.

For ourselves we are heartily tired of this thing, and wish that there could be no more of it, or at least something less of it. It reminds us of the morbid habit of mind which Saintine in Picciola, attributes to his prisoner: the latter could not look on the most radiant texture of silk, without thinking of the miserable worm that makes a winding sheet of its coccoon; he could not look on the most ravishing human face and form, without seeing beneath the surface a ghastly and eyeless skeleton. So with your chemist: he analyses everything; there is nothing sacred to him; nothing that is tender, beautiful, or true—nothing that warms the heart, that fires the imagination, that gratifies the taste—nothing near or remote, old or new—absolutely nothing, which he does not attack with his agents and reagents, which he does not reduce to some chemical formula, or equation, with C, H, N, O! We say, let there be no more of it! And those things that are formulated already, let them keep as they are!

But enough, enough of this paper. Let us go to the transactions proper, the "Minutes of the Twelfth Annual

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* A well known police officer.

Meeting." There are several things worthy of notice, but we have only time for two or three. And first we wish to supply the omissions, alluded to in our previous number, in the address of welcome on the part of our State Medical Society. The orator mentions the libraries only of Louisville and Lexington; but he might have mentioned, and we think ought to have mentioned, the magnificent donation made by the former city for a medical school, a donation of land, of house, and of money, estimated a score of years ago at more than one hundred thousand dollars! And it is the more strange that all of this should have been omitted or neglected by the orator, when we remember that he was at the time of the address, as he is now, a member of the faculty of this very school, and when we remember the volubility of certain parties about this very donation, a few years ago, and undoubtedly within the orator's memory. All that he said is this—and if he ever repeats it, with or without our corrections, we hope that he will say it a great deal better:

> One of those libraries, belonging to the medical department of the University of Louisville, at its best estate, numbering 4,000 volumes, you will doubtless visit during your sojourn among us, and, although much defaced and mutilated by the conflagration which laid that institution in ruins two years ago, you will still find it to be a large and choice collection—adequate to the requisitions of medical research, and presenting satisfactorily the course of medical literature from the time of Hippocrates to the present day.

Why, here is another omission! He mentions but one of the many remarkable additions made to the library after "the conflagration," viz: Hippocrates, Cruveilhier's plates, Carswell's, and "the great work of Swammerdam!" As it was thought worth while to publish these to twenty thousand laymen two years and a half since (see Louisville *Daily Journal*, Sept. 21, 1857), certainly it was worth while to mention them to two or three hundred professional gentlemen, gathered from all quarters of the union, and able to appreciate such wondrous things. We feel quite indignant! Or did the orator wish to see the gentlemen of the Association surprised and delighted—in a shiver of admiration—on occasion of a visit to the library? But, now that we look again at the preceeding quotation, we see that the orator refers to the institution "at its best estate," when, if our memory serves us, it could not boast a Swammerdam, though it could Hippocrates and the "plates," and when, moreover, in the opinion of certain parties, it was not worth one—which makes it a little better for the orator. But "the great work of Swammerdam!" We like that! and we wish it had been mentioned.

Turning over the "Minutes" we come to p. 28, and find that on the "Second day, Wednesday, May 4, 1859"—we are always particular, but this is a particular matter—"Dr. D. MEREDITH REESE, Chairman of the Committee on Nominations" first "called attention" to a "fact, then "stated" something, and after awhile "stated" something else; then "he called attention to"—but this is what we are after, and so we quote, and *italicize:*

> DR. REESE also called attention to the necessity of some radical change in the mode of appointing committees to prepare treatises on scientific subjects to be reported at the annual meetings. It had been seen that on yesterday a large majority of the committees made no reports, and did not even see proper to send in any communication explanatory of delay. The difficulty heretofore has originated in the mode of selection adopted by the nominating committee. It has been custonary for gentlemen to hand in their names and the proposed subjects, on slips of paper, and the committee, without further investigation, have so published them in the annual reports. Thus it has happened that appointments have been most injudiciously made, *and gentlemen to whom a special duty has been assigned have been found to know less of that than any other subject.* He therefore hoped that no committee of last year would be reappointed or continued, from which no report had been had and no communication received.
>
> On motion, the Nominating Committee was unanimously instructed to act upon the suggestions of the chairman, who also stated that there should be some definite expression of disapprobation as to the course of those gentlemen *who had volunteered essays, and had their names reported in the newcpapers and spread over the land, and then paid no attention to the matter.*

Now this is a most remarkable revelation! The "American Medical Association," which, collectively and individually, seems to have an extraordinary sensitiveness in regard to quackery—its very sleep, indeed, being murdered by its fears; which sets its face like flint against the most remote and shadowy complicity with what it chooses to deem quackery—nay, rather, whose face is writhed into an expression of infinite horror and scorn, such as would 'make mad the guilty and appal the free;' which cannot brook that a physician should be mentioned in a newspaper, in a card, or even in city directory, especially named as one who devotes himself to some particular department or branch of the profession—the American Medical Association, notwithstanding all this, to be turned by its own members into a great organ or medium of advertisement, and for specialities, too! Well, well! The world does move, we suppose; but of a verity it seems to move precisely as it did before the Association was born. And this revelation—does it explain, in any degree, the marvellous alacrity exhibited by many to become members of this Association? For, it is the most curious thing in the world, that men, as members of an Association, aggregated in any way for a common purpose—ostensibly so, at least—can and will do that, and aid their fellows in doing that, which they would scorn do as individuals, which they brand and affect to scorn when it is done by individuals outside of such association! 'Corporations' —and associations as well, we suppose—'have no souls,' says one. Yes, but why? Has any body—any philosopher, any metaphysian, any chemist—ever inquired? May we hope that Prof. Jones, who is something of these "three gentlemen at once"—a sort of modern and earthly Cerberus, as well as an 'admirable Crichton'—will take it in hand?

To return: this especial sensitiveness of the Association, to us, who have a habit, almost instinctive, of looking beyond the mere shows of things, always argued a consciousness of guilt; it looked very much like a certain modesty which is found associated with that which is not modesty. And the members of this Association, like the virtuous prudes, are remakable for their zeal in hunting down some unsuspecting individual who in going about his daily business has laid himself apparently open to some charge of want of purity! Oh, their zeal is only equalled by their horror! And the zeal is quickened and heightened, and likewise the horror, by the consciousness of their own shortcomings—they are all the more zealous, and all the more horrified, because in connection with the show of zeal against some unfortunate individual their names are again "reported in the newspapers and spread over the land!" O, most immaculate Association! thrice virtuous gentlemen! haters of quackery, all! How good and pure you are, to be sure! Here, now, two or three years ago, you were about to send this very man, Dr. Reese, to Coventry, for having testified in reply to a question (we take the Doctor's version) to the qualifications of a certain man for a certain place. You didn't deny the truth of his statements, didn't deny the qualifications of the individual; but it turned out that the latter had once in his life left the legitimate practice of the profession, and vended pills of his own compounding—just such, doubtless, as he had often prescribed while in practice—and, therefore, Dr. Reese, in attesting the qualifications of this man, was guilty of complicity with quackery. And you made Dr. Reese, as the Chinese say, 'eat dirt.' But how 'the whirlgig of time brings in it revenges!' Here is your late criminal, whitewashed, purified, without the smell of fire on his garments, at the head of the "Committee on Nominations"—like Milton's head devil,

> —— above the rest
> In shape and gesture proudly eminent—

arraigning you, or some of you, as gentlemen "who had volunteered essays, and had their names reported in the newspapers and spread over the land, and then paid no attention to the matter;" as gentlemen to whom a special duty has been assigned," at their own instance, but who "have been found to know less of that than any other subject." Now we might suppose this to be malice on the part of the chairman of the nominating committee, but it goes unrebuked—and, morover, we ourselves recognise in the names of *non*-reporting committees some that we have seen thus reported before. And this reminds us that at the very time of these troubles about McClintock, we in writing to some correspondent, a member of the Association, ventured the assertion that half or two-thirds of those who voted at the Chicago meeting to expel the former were just as guilty as he of playing the charlatan—but we scarcely expected the Association itself to furnish the proof!

We have not the heart to say another word. We feel too much hurt at all this to laugh—even if it were a laughing matter; we are too big to cry about it, even if our grief did not lie too deep for tears. So we will only express a hope, meekly, and humbly, that for the future the Association will strive to do better. And we think it will and can, seeing that now it is cut up into sections, and that it has for its presiding officer one who has no nonsense about him, who is unsophisticated in that respect, and who can say a plain thing in a plain way, a good thing in a good way, a strong thing in a strong way, and, when necessary, a fine thing in a fine way. We await the results of the New Haven meeting with some interest.

Reader, one moment!

We had just closed this volume of Transactions, and were about to lay it away to be guarded by our household gods, when the "aim or reason" of Dr. Jones's puzzling paper came upon us, flashing us through and through!

Strange, when now the aim appears so plain, that we did not see it sooner! Why, the paper absolutely grows luminous, and glows like a star—yes, like stars!

Ah, if we could take back what we have said! We thought the paper as dumb as an oracle or an oyster, yet it speaks its own language, which now we can interpret. If we could take back—but "the forces of the sun and fixed stars," transmuted into the "vital, muscular, and nervous forces" of a printer's arm, are too fast for us. What is writ, is not only writ, but printed too. Strange, that we who have always held secretly a belief in the stars, who have invoked their aid, and received it—strange, that we should overlook the drift of a paper devoted to their influences! No wonder Mars looked lurid, and malicious! Whatever chagrin we feel, though, is tempered by our pride of discovery, and pride in the discovery, one which flows in so directly with our inmost dreams, long hidden, to be hidden no longer!

What is it, you ask? That this paper is an attempt to restore Astrology—'a science formerly in great request, as men ignorantly supposed the heavenly bodies to have a ruling influence over the physical and moral world; but it is now universally exploded by true science and philosophy.'

'Ignorantly supposed,' quoth the lexicographer! 'Universally exploded,' indeed! We know better, don't we, Dr. Jones? We do not rudely blame the faith of him who believes 'in the might of stars'—not we. Oh, well we know, that it is

> not merely
> The human being's Pride that peoples space
> With life and mystical predominance!

These lexicographers, these mole-eyed fellows,

> Blind as that subterrestial, who with wan,
> Lead-color'd shine, lighted them into life—

these they may see, perhaps, 'the common, the terrestrial' —may even 'knit together the nearest with the nearest;' but

——— whate'er
Full of mysterious import Nature weaves
And fashions in the depths—the spirit's ladder,
That from this gross and visible world of dust
Even to the starry world, with thousand rounds,
Builds itself up; on which the unseen powers
Move up and down on heavenly ministries—
The circles in the circles, that approach
The central sun with ever-narrowing orbit—

these, we alone can see—we, who have the eye,

the unsealed eye,
Of Jupiter's glad children born in lustre!

Die sieht das Aug nur, das entsiegelte,
Der hellgebornen, heitern Joviskinder!

Yes, these constellations—

Die himmlischen Gestirne machen nicht
Blos Tag und Nacht, Fruehling und Sommer—nicht
Dem Saemann blos bezeichnen sie die Zeiten
Der Aussaat und der Ernte.

No! They govern worldly fates! 'Dort winken sie herab!'

Yonder they move, from yonder visible sky
Shoot influence down;—

and still for us—and so it will be evermore—

'Tis Jupiter who brings whate'er is great
And Venus who brings everything that's fair!
Und jedes Grosse bringt uns Jupiter
Noch diesen Tag, und Venus jedes Schoene!

But to find this where we have found it, and so unexpectedly too, has struck us with a very fever of wonder—

——— hat uns
Mit schauernder Bewunderung durchdrungen!

As an effort to restore astrology, to transform to realities its dreams, to give these shape and substance and make them palpable and familiar, the paper assumes something of coherency and dignity, and is much to be commended; indeed, even its style becomes at once remarkable for fitness, and for rhetorical brilliancy and finish. We fear, though, that these astrological aspects of the paper will not gain it many friends. These "parasites and vultures," whom Dr. Jones very justly contemns, or seems to, and really they are a despicable set, will not understand it at all. They never do understand anything above mere bread-andmeatin medicine; and, of course,

> When lofty thought
> Lifts a young heart above its mortal lair,

as in the present instance, they will not be expected to understand. The author has anticipated this, he is fortified; and, 'with a mind that comprehends the universe, with thoughts that wander through eternity,' what need he care? Let these "parasites" all become Thersites, if they will—let them rail! Who cares?

But what will the Fellows of the Association say of this revelation?

Abstracts and Selections.

MR. TEALE *on Stone in the Bladder.*—In the December number of the *Medical Times and Gazette*, we find a record of eighty-seven operations for the removal of vesical calculi; fifty-seven of these occurred in the adult male. In thirty-five of this class the latteral operation was performed, with the result that twenty-two recovered and thirteen died, or 1 in 2⅗. In fifteen cases lithotrity was performed, and of these fourteen recovered and one died, or 1 in 15. In seven cases median lithotomy was performed, and of these six recovered and one died, or 1 in 7. The whole number of operations by the median method performed in Leeds to December 1st, 1859, was twenty-three, including those above stated, which occurrred in Mr. Teale's practice. Fifteen of these were made on adults, with thirteen recoveries and two deaths. On this Mr. Teale remarks:

> In conclusion, I will take a brief survey of the changes that have occured in my own views and practice, as to the treatment of stone in adult

males, since my first operation in 1826. The successive phases may be thus arranged:—

1. Lateral lithotomy in all cases.
2. Lateral lithotomy the rule, lithotrity the exception.
3. Lithotrity the rule, lateral lithotomy the exception.
4. Median lithotomy the rule, lithotrity the exception.

In the early part of my practice lateral lithotomy was alone thought of. As soon, however, as lithotrity received its last great improvement from the introduction of the screw-lithrotrite, I adopted the operation; first in select cases where the stone was small: afterwards it was extended to stones of larger size, until it became, in my estimation, the operaton to be generally preferred, leaving, however, a large number of exceptional cases, in which the stone was great, or the prostate much enlarged, or the bladder highly irritable, for lateral lithotomy. The next change change was caused by the revival of median lithotomy in an improved form; and from the limited experience I have yet of the operation, I feel a strong conviction that it will be the one which I shall generally adopt, leaving lithotrity to the few exceptional cases suitable for it, in which the patient has an insuperable objection to the knife.

It may be asked, Why was lateral lithotomy superseded in part by lithotrity? In reply, it may be said that the acknowledged fatality of the former operation induced surgeons to test the value of any other proposal which held out a better hope of success. In my own practice, thirty-five operations of lateral lithotomy in adults were attended with thirteen deaths, or one death in one and two-thirds of the cases. By the introduction of lithotrity, the result is improved by the addition of fifteen cases, with only one death, giving a result from lateral lithotomy and lithotrity conjointly, of fifty operations in adults, with fourteen deaths, or one death in three and a-half cases.

If the question were now asked, Why I would resort to any other operation when lithotrity has furnished me with a result of fifteen cases with only one death, I would reply, that in each case so treated, the patient has generally had to submit to several operations or "sittings," and that any one of these sittings might have been, as some of them were, followed by symptoms severe enough to cause serious anxiety.

In the hope of diminishing the risks to which, from the plurality of operations, the patients subjected to lithotrity are exposed, and of obtaining better results than lateral lithotomy affords, I have been desirous of giving a fair trial to the median operation.

I have now operated on adults seven times, three of these operations being performed on the same individual. The result of these has been one death in seven operations. If such a proportion of success can be maintanied, it would be a great gain, as far as my own experience goes, upon lateral lithotomy, or even upon lateral lithotomy and lithotrity conjoined.

I have great expectation that such will be the result; for, if we except the fatal case alreadv described, presenting extraordinary difficulties, which might probably be overcome hereafter, the remaining six recovered so favorably that it was difficult to believe the patients had been subjected to a grave operation. They formed a marked contrast with the adult patients who had undergone lateral lithotomy, and who subsequently recovered.

I have no hesitation in extending the median operation to children, although lateral lithotomy in children has presented me a result of eighteen operations without a single death. Yet a considerable number of these patients were seriouslv ill, and caused me much greater anxiety than has been felt for the few young subjects whom I have seen under the median operation

Mr Erichsen, in a clinical lecture on median lithotomy delivered at University College Hospital, remarks:

In conclusion, then, it appears to me that the median operation when performed in suitable cases, has the advantages over the lateral of being attended by less risk of hemorrhage, and with less danger of injury to the pelvic facia;" * * * * * * † * * *

He thinks the median operation is to be performed, in the adult, in cases where the stone is small, not exceeding an inch in diameter, and in which,—from the condition of the bladder—lithotrity is not admissable. He says, moreover:

Finally, in cases in which the patient is so anæmic that the loss of an additional ounce or two of blood might turn the scale against him, the median is preferable to the lateral, as although it is by no means almost a bloodless operation, as is supposed by some, yet there is less hemorrhage during the performance, or rather, perhaps, less oozing after its completion than in the lateral, and there is certainly not the danger of the profuse bleeding that is sometimes seen in that operation. * *—*Lancet.*

Croup—Enlarged Tonsils.—M. Ottenbourg informs the Medical Society of Paris, that observation has led him to the conclusion, that permanent enlargement of the tonsils protects against croup. Children, exposed to the infection of croup, having enlarged tonsils escaped the disease, while others without hypertrophy of these organs contracted croup. This view of the matter has led M. Ottenbourg to this practical result. He advises the parents of children not to allow their enlarged tonsils to be removed.—*Braithwaite's Retrospect* from *Med. Times and Gazette*, May 21, 1859, p. 517, *Different Modes of Performing Lithotomy in the English Hospitals.*—A large majority of English surgeons employ the ordinary lateral method of lithotomy on a curved staff. There has been, however, a considerable disposition to endeavor to improve it of late years. The median plan, so strongly recommended by Mr. Allarton, has been tried by not a few London surgeons, and amongst provincial ones has found a warm advocate in Mr. Teale, of Leeds. At the London Hospital it was first adopted by Mr. Ward about two years ago, and since then has been employed by his colleagues, Mr. Critchett and Mr. Gowland, each in a single instance. All the three patients were children, all recovered well, and in all it was considered that much less than the usual amount of bleeding took place. At Guy's Hospital, Mr. Cock has performed median lithotomy several times, and Mr. Erichsen has done the same at University College Hospital, both surgeons being, we believe, well satisfied with its results. On all hands it is considered to be the best adapted for children and for small stones. At St. Bartholomew's, Mr. Lloyd still continues to operate in all cases by his recto-urethral (median) method, which we described in detail when he first adopted it in 1853. He informs us that he has not yet lost a case after it, and considers it decidedly preferable to the lateral operation. His colleagues, however, without exception, we believe, always employ the latter. At the Metropolitan Free, Mr. Hutchinson always employs his rectangular catheter-staff, and considers that he obtains great advantage from it. The same instrument has been employed at King's College by Mr. Lee, but it is not, as far as we observe, in use at any of the other Hospitals. In a recent instance in which the calculus was of large size, Mr. Hutchinson injected the bladder with oil instead of water, in the hope of facilitating the dilatation of the parts.

With regard to the median operation as advised by Mr. Allarton, it is universally admitted to be adapted only for small calculi. Now, Mr. Lloyd's experience during the last few years has quite proved, that when the anterior commissure of the sphincter ani is cut clean through from the perineal wound, there is no danger of the parts not healing. Might it not be well, therefore, to adopt this measure whenever, after the usual median incisions, the stone has been reached and is found too large for removal? Mr. Lloyd's operation gives abundance of room.—*Braithwaite's Retrospect* from *Medical Times and Gazette*, July 9, 1859, p. 34.

Croton Oil as a Counter-irritant in Hydrocephalus. By Dr. JOHN WATSON, Southampton.—[The author has on several occasions witnessed the successful application of croton oil to the scalp after the setting in of the most formidable symptoms of hydrocephalus. A strumous-looking child, aged two years, on the cure of an eczematous eruption of the scalp, with copious discharge, had an attack of acute hydrocephalus: the symptoms soon became very severe, the child being semi-comatose, and the pulse slow and irregular.]

Thinking it possible for his present attack to be connected with the previous condition of the scalp, as a means of best imitating the eczematous eruption, the croton oil suggested itself. With the sanction of the gentleman who was attending with me, I directed the croton oil liniment (croton oil, half a drachm; turpentine liniment, half an ounce) to be rubbed over the entire head every four hours till a plentiful crop of pustules should make their appearance; after which we soon had an amelioration of all the symptoms, and he gradually became convalescent, though he was unable to speak for several days, and could not stand alone for a considerable period.

It is now several years since the occurrence of this case, which made a deep impression upon me; for I did not remember to have seen a recovery under such unfavorable circumstances. In the same stage of the disease, whatever may have been its assumed cause, I have since adopted the same course, and as far as individual experience goes, bear testimony to its efficiency. It is not so objectionable to the little patient's friends as a blister, and is at the same time more managable; and, from the extent of surface to which it is applied, decidedly more powerfully revulsive.—*Braithwaite's Retrospect* from *British Med. Journal*, July 9, 1859.

On the peculiar Efficacy of Sulphate of Copper in Exciting Vomiting in the Treatment of Croup. By Dr. MISSOUX.—The importance of repeated vomiting in the treatment of croup is admitted by many practitioners, but the choice of an emetic is a point which has not hitherto been fully determined. Since vomiting has been considered by some as the mechanical act which induces the detachment of the false membranes, tartar emetic has been employed for the purpose. Others have preferred ipecacuanha, the dynamic action of which is less depressing than that of tartar emetic, but there its superiority ends. The sulphate of copper, in addition to its emetic action, possesses a very remarkable property of acting locally, and this peculiarity makes it superior to tartar emetic and ipicacuanha. With the latter substances, the patients derive benefit only from the mechanical act of vomiting, and when the false membranes are expelled, others are formed. The case is quite different with sulphate of copper, for when a solution of this salt is employed, the secreting surfaces are so modified that no more false membranes are formed, or if they are formed, they no longer present the plasticity which renders them so adherent to the adjoining parts. Dr. Missoux, after a practice of eighteen years, states that the sulphate of copper has been in his hands the most successful emetic agent in the treatment of croup. Its purifying action appears to him the more valuable, because diphtherite (croup) at its commencement is often localized in the throat, and by applying remedies early, the extension of the false membranes to the larynx may be prevented. He wonders that this topical action of the copper salt has not hitherto been observed upon plastic exudations which are visible to the eye, such as cutaneous diphtheria, and that of the vulva. the throat, and the nose, for its effects in these complaints would have induced a speedy conviction of its utility. The dose in which Dr. Missoux administers the sulphate of copper is rather larger than that prescribed by other physicians. For young children he dissolves a quarter of a gramme of the salt in 125 grammes of distilled water, and orders a teaspoonful to be given every ten minutes, until vomiting is produced. After the age of puberty, and in adults he increases the dose to one gramme, without his having ever witnessed any poisonous effects. The more the solution is concentrated, the more frequently the doses are given, and the earlier its administration is resorted to, the more prompt and certain are the effects of the treatment. Out of thirty diphtheritic cases, Dr. Missoux lost only two. This result may surprise some readers, but he assures the profession that he has determined the existence of croup only after actually observing the presence of the false membranes in the bronchi, trachea, and larynx. *Braithwaie's Retrospect* from *British and Foreign Med. Chir. Review*, July, 1859, p. 545.

A New Tea.—"Dr, Hassall in his evidence before the committee described a kind of spurious tea called 'Lie Tea' —a very fit name for it, though it was given by the Chinese— used to adulterate other qualities; and it was found that much of what was sold to the poor as tea contained no tea whatever. One sample was brought before the committee, by which, though it excited a smile, they were much disgusted. Large quantities of tea were mixed with silkworms' dung; it was called and sold as 'gunpowder tea.' Of course the committee did not venture to taste it, but they were assured its flavor was very peculiar; yet it found a large market in the poor parts of the metropolis, as the silkworms' dung gave it the appearance of great strength."—*Med. Times and Gazette.*

Editorial Department.

We have been a good deal provoked, in looking over the numbers of the Journal for February and March, to find in each one or more borrowed articles without the proper credit, and in one instance, at least, without any credit. We endeavored in the beginning to guard against this thing, and we are pretty certain that it will not take place hereafter. Our opinion of it is just this: We would much rather take another man's sheep than another man's thoughts—by so much the more, indeed, as we would prefer being thought empty in the epigastric region than in the cephalic extremity, empty-stomached rather than empty-headed. We know of people, to be sure, who differ with us, or have differed, in this regard; but we suppose that it all "depends on the way one has been brought." The instances, in our own case, are all the more annoying, from the fact that we were just going to call a cotemporary to account for having filched from us on two or more occasions; but we are esstopped from saying anything about it now, until we mend our own ways.

Appointment of State Registrar.—We copy the following from the *Louisville Daily Journal*, of March 16.:

> Dr. S. M. Bemiss, of this city, has been appointed by Governor Magoffin to the new office of Registrar, created by the act recently adopted to amend the act requiring the registration of births, marriages, and deaths. The salary attached to this office is $1500 per annum, and its duties will require the collection and publication of an annual report, which will involve much labor, and require great statistical tact and medical experience. The importance of such information as the Registrar will lay before the public requires extreme care to prevent errors, and professional skill to make it of practical benefit. The selection of Dr. Bemiss will secure for the performance of these duties all the requirements to render our system of registration complete.

We assent to all this fully. Whilst we are sincerely glad, though, that the office has been given to Prof. Bemiss, we as sincerely regret that it was not given to Dr. W. L. SUTTON, of Georgetown. It was due to him before any man else, we care not who, and before all men else; he at least should have had the refusal of it. He had and has claims to it, which no other man had, or has, or can have.

Without Dr. Sutton's efforts the office of Registrar would not now be in existence. He was the prime mover, the instigator of registration reports in this State. He initiated the movement in Kentucky. As chairman of a committee appointed by the State Medical Society in 1851, he pressed the subject upon the attention of the physicians of every county of the State, upon that of the executive officers of the State, and finally upon that of the members of the legislature, by memorial and by personal appeal. The result was the passage in 1852 of a law requiring returns of births, marriages, and deaths to be made to the clerks of the several counties, and by them to the auditor of State, whose duty it was to make reports to the Legislature from the information thus obtained. Thus far these reports have all been prepared for the auditor by Dr. Sutton. He has performed all the labor, year after, without emolument, or, until recently, with an emolument ridiculously small in comparision with the work—for here, as in other things, it is the first step which costs. And now that he has done all this, that he has educated, on the one hand, the people of the commonwealth, and, on the other, the Legislature, to the good to be derived from such an office, the benefits to accrue from it, the absolute necessity that there is for it—now, too, that by his unrewarded labors he has made the labor of the office comparatively plain and easy—for the office to be given to another man, is not to be thought of for a moment, is not to be tolerated, at least, without a strong protest. Politics, we are told, had something to do with it. To which we answer: politics have to do with a great many things with which they have no just and proper relation. But what politics? The recipient of the office is an old fashioned whig, as we can affirm; and we will venture to affirm that Dr. Sutton is, too, from our knowledge of his thorough soundness. No; politics, we are glad to say, had nothing to do in this case.

But that is not the question. Here it is: this thing of one man's doing the labor, as it were, and another's reaping the benefit; which is all wrong to anybody's sense of justice and of right; but, if it were not so, we ourselves have suffered too much in this way, to let this instance pass without comment.

We repeat, then, in conclusion, that Gov. Magoffin has made a most excellent appointment. Prof. Bemiss, would have been and is, of all the men whom we know, our first choice after Dr. Sutton. But the appointment of Dr. Sutton would have been only a fit recognition of his services to the public, in the virtual creation of the office of Registrar, and in many other ways during a life spent in one of the hardest professions in the world—would have been an act graceful in itself, and grateful to every man in the Commonwealth.

These are the sentiments of all with whom we have conversed about this matter.

OBITUARY NOTICES.

Dr. CHARLES A. FRICK, Professor of Materia Medica and Therapeutics, in the Medical Department of the University of Maryland, died recently in Baltimore, at the early age of 37. Dr. F. fell a victim to diphtheria, contracted from a patient at the Infirmary. A Baltimore paper very justly says:

"To the public at large he was known as a diligent and faithful student of books and of nature—an independent and original thinker, of large and careful observation and patient and laborious analysis. His contributions to medical literature were frequent and highly esteemed, and through them he was known most favorably to the Faculty, in Europe as well as his own country. In the practical department of his profession, he was eminently popular and successful, not less from the ability and conscientious care with which he fulfilled its laborious duties, than from his cordial and attractive manners and sympathising nature. In the relations of private life no man ever gathered round him more unqualified affection and respect. He was full of gentleness and kindness, of modesty and unobtrusive charity."

We have received a copy of the resolutions passed at a meeting of the physicians of Washington county, Ky., on occasion of the death of Dr. FRANK E. POLIN, of Springfield, in January last. The resolutions are but a just tribute to the social and professional worth of the deceased. We knew Dr. POLIN well, and have rarely met a man who impressed us so favorably. Dr. P. was a true surgeon—not a timid, hesitating one, taking refuge from difficulties or responsibilities in conservatism; but one who had the courage as well as the skill to do that which his judgment, dictated, whatsoever it might be. Few men in Kentucky with so short a career, have done more, or deserved better.

G.

LOUISVILLE

Medical Journal.

MAY, 1860.

REVIEWS.

Art. I.—*A System of Surgery, Pathological, Diagnostic, Therapeutic, and Operative.* By Samuel D. Gross, M. D., Professor of Surgery in the Jefferson Medical College; Member of the American Philosophical Society; Fellow of the College of Physicians of Philadelphia; Corresponding Member of the New York Academy of Medicine, and of the Imperial Royal Medical Society of Vienna; Author of a Treatise on the Urinary Organs, etc., etc., etc. Illustrated by nine hundred and thirty-six engravings. Two Volumes. Vol. I. pp. 1162: Vol. II, pp. 1198. Blanchard & Lea: Philadelphia: 1859.

Of the twenty-five years' experience to which the author of these volumes appeals on every page from the dedication to the end, much the larger and better portion—better, because removed as far from the crudities of early professional life as from the opinionativeness of the late—was gained whilst practicing and teaching surgery in this city. It is on our part, then, not merely right and proper, but it may be said to be a duty, which we owe as much to Dr. Gross as to ourselves, to examine these volumes carefully and critically. We cannot ignore them if we would. The doctrines taught in them, having been taught for half a generation in the midst of us, are in great part, if not in whole, those which govern the practice of surgery about us and around us at this moment. If these doctrines are good, they cannot be too strongly confirmed; if bad, or wrong, they cannot be too strongly and too quickly condemned. It is proper, too, that we examine these volumes in their literary as well as in their scientific aspects. A book which is to serve as a "guide to the practitioner in the daily routine of duty," becomes a guide as well to speech; and, even when it does not corrupt the practice of surgery, it may corrupt the language of surgery and of surgeons.

These volumes challenge attention for another reason. They speak literally and metaphorically *ex cathedra.* The tone is cathedrated from the beginning; it is not merely judicial, and authoritative, as it has a right to be, but it is self-sufficient and strongly magisterial; it is positive, decisive, oracular; it is dogmatical, arrogant, and sometimes haughty—qualities which we have not been accustomed to find in Dr. Gross's writings, and the presence of which has taken us a little by surprise. Nor, for the life of us, can we see any reason for them here, any necessity for them. Dr. Gross's position before the public and before the profession, as well as in the latter, is an exalted one; it is not questioned, so far as we know, nor is it likely to be. Dr. Gross has won this position, and has sustained it, by hearty, and legitimate, and faithful endeavor; he has not been assailed in it publicly or privately; he cannot be degraded from it save by himself. Under such circumstances, it was all very well for one, many of whose pupils are grey headed, to be a little authoritative, a little magisterial even, consciously or unconsciously; it might have been anticipated that he would put forth his opinions confidently and assuredly; but it could not have been expected that he should utter them defiantly and gladiatorially. A manner like this is always unfortunate; it excites at once a spirit of rebellion in the reader, who will scarcely be ready to believe when he is dared to disbelieve—and Dr. Gross has cut the leaves of too many books not to know this.

But, if we have been surprised at this, we have been still more surprised at the style of these volumes. It is ambitious, which may be allowable; but often also, it is involved, confused, obscure, overloaded—it is at times ostentatious, and frequently egotistical—and this is not allowable. The author often writes either without a sharp, clear, distinct conception of the idea which he wishes to utter, or else without any clear and delicate perception of the meaning of the vocables which he uses—perhaps the latter, and occasionally perhaps *both*. Now Dr. Gross, though by no means old, is not a youth, especially in this matter of writing: a whole generation has elapsed since he first put pen to paper. In this interval, he has been advancing from year to year, by compilation, translation, and original production—each of unquestionable merit—towards this system of surgery. We have in mind, and we think that we have in our library, a volume published in 1830, before many of those who will read these lines were born, and this volume may be taken as the "germ" that has developed from time to time, and expanded, and finally "exploded," as our author would say, into the double-volumed treatise before us. With most men the more they write, the better they write; the style becomes neater, cleaner, more compact; it 'clears itself as it goes.' Yet, here are pleonasms, tautologies, verbosities; here are obscurities and ambiguities; here are neologisms (even whilst those of others are objected to), barbarisms, and occasionally solecisms; here are lexical faults; here are faults in the collocation of words in a clause, in the arrangement of clauses in a sentence, in the arrangement of sentences in a period and in a paragraph! Surely, these things, some of which might be overlooked in a young author, immersed in his subject and unused to composition, are not to be overlooked in Dr. Gross; they are not to be overlooked in a treatise which is intended to govern the practice of surgery, and which, therefore, may mould the speech of surgery.

All this, now, has surprised us not a little, and for two reasons: 1st, Dr. G. did not write in this way formerly—we insist upon this, and in proof of it, we present, as the best written portions of this treatise, those written years and years ago. 2d. Every notice that we have seen of these volumes, from whatever source, has marked with emphatic phrase the excellence of the style, the classical style, the scholarly style of the author—certainly not in derision!

To substantiate our own judgment in this matter, we quote some passages—though as we are compelled to confine ourselves to those that are brief, we shall not attempt to give examples of each of the errors we have mentioned.

We may begin with the very dedication, where something of the ostentation and of the obscurity, alike characteristic of these volumes, breaks upon us at once:

> To the numerous pupils who, during the last quarter of a century, have attended his lectures, and who are now settled in every section of the United States, in the honorable pursuit of their profession, these volumes, designed to illustrate one of the most important and valuable branches of the healing art, are respectfully and affectionately inscribed by *their* friend, the author.

This obscurity arising from uncertainty of reference in pronouns, which is thus met with in the very beginning, pervades each volume, growing deeper as we advance. We shall illustrate it a little further. Here is an example:

> Concussion, for example, of the spinal cord, when not immediately followed by death, is generally productive of excessive prostration of the vital powers, hardly less extensive and fatal than *that* of the brain itself.

Can the reader tell what "that" means? Better thus—though we are guessing:

> ——"prostration of the vital powers, hardly less extensive and fatal than *that produced by concussion* of the brain itself."

Here is a neat little thing:

> Thus, spasmodic stricture of the tube, sometimes of an exceedingly severe and intractable character, may be produced by disorder of the stomach, bowels, uterus, or spinal cord, *which* can only be relieved by addressing our remedies to the seat of the primary affection.

Now, just insert *and* in place of *which*, and see if the sentence is not improved.

And here is another:

> Thus, it is well known that persons of a nervous, irritable temperament are more prone to be affected with it than such as are of a sanguine, or leucophlegmatic disposition, owing no doubt to the fact that *they* possess a more highly-wrought nervous system.

Who are "they," the "leucophlegmatic" or the "irritable?"

This is not very clear:

> A second rule, in the use of anodynes, is to exhibit the remedy, whenever its employment is indicated, in full doses, experience having shown that *they* make a much stronger, as well as a much more soothing, impression in this way than when *they* are taken in small, and frequently repeated doses.

And, after it is made out, all that it amounts to is that a "full dose" makes a stronger impression than a small dose. Does he suspect us of homœopathic tendencies?

Can any one tell us what it is that "participates" here?

> —— but from the resemblance which exists between these organs and the testes, both in structure and function, and from the fact that the latter are so often involved in the disease, it is highly probable that it will be found, as our pathological researches are extended, that *they* frequently seriously participate in the morbid action.

The author's treatment of granular lids is pretty thorough:

> If the granulations are very large and exuberant, I evert the lids and shave *them* off with a sharp scalpel close down to the conjunctiva, without including this membrane in the operation; and having encouraged the flow of blood as long as possible with a sponge and tepid water, I immediately cauterise the raw surface with a *stick* of sulphate of copper, expressly prepared for the purpose.

It is very good of him certainly to leave the conjunctiva untouched, else he might renew in a patient the fate of Regulus with his uncurtained eye-balls. And how large is that "stick?"

But what is it that must be "well tempered" here—the "organs" or the "injections?" It would make a material difference in the kind of "mischief"; and these "organs" might do mischief, even when "well tempered"--perhaps the most mischief when best "tempered:"

> Although the female organs of generation bear stimulating injections much better than those of the male, yet there is no doubt that, unless well tempered, *they* often do immense mischief.

Sometimes this obscurity arises from the pronoun's being referred to different words, which is equivalent to using the same word in different senses in the same sentence. Thus, speaking of "the nomenclature of inflammation:"

> As *it* now stands *it* is based essentially upon the anatomy of the affected tissue, structure, or organ, the term *itis* being merely added to the name by which *it* is generally known, as sclerotitis, cystitis, laryngitis.

And this about the "new structure" called a "cicatrice:"

> Even then *it* is at best only a very imperfect copy of the original, although *it* is capable of supplying *its* place and of executing the functions which nature has allotted to *it*.

Let us take the second sentence in the second volume:

> The presence of earthy matter, however, to which the bones are indebted for their solidity and strength, so as to render them fit organs for locomotion, exerts, as is well known, a modifying influence, not only upon the frequency of *their* diseases, but also upon *their* progress, the character of *their* products, and the mode of *their* termination.

And this, a few pages distant:

> In making this remark, I do not mean to say that there is always, under such circumstances, a deposite of tubercular matter; on the contrary, I am satisfied that there is, in most cases, merely a tubercular diathesis, predisposing the part to the disease, and thus rendering *it* less capable of resisting *its* effects when once *it* is established.

We may give one more:

> A very unseemly deformity of the lower jaw is occasionally produced by an elongated condition of *it*: *it* is generally caused by the dragging exerted upon *it* by the vicious cicatrice of a burn, or by the pressure of some tumor, but instances occur in which *it* is congenital.

Now, it will not do to say that in cases like these the meaning of the author could be ascertained—that is not sufficient; for it is the business of an author, his duty, so to write that his readers shall understand him in spite of themselves, not in spite of himself. Nor, is it enough to say that the prominence or rank of certain words, and, at other times, what we may call, though perhaps incorrectly, the regimen—and the two govern every reader, whether he is conscious of it or not—will relieve the sentence of its ambiguity, or of its obscurity. The difficulty is that our author disregards these things as often as he regards them; it is all haphazard, as may be seen in some of the sentences that we have given. In further illustration of this, we give an instance of another kind, which is by no means solitary:

> The arachnitis of infancy generally begins in reflex irritation, which has its seat in the bowels, stomach, liver, skin, or gums, fretted, perhaps, by the pressure of an advancing tooth.

Now, if a physician of the sort that Drake used to describe as 'fellows who couldn't tell a mucous membrane from a bone,' were to 'give his mind' to this sentence, would he be able to tell what it is that is "fretted?" For whatever is said here of "gums," is likewise said of "bowels" and of "stomach," of "liver" and of "skin." But suppose it written thus:

> The arachnitis of infancy generally begins in reflex irritation, which has its seat in the bowels, stomach, liver, *or* skin, or *in the* gums, fretted, perhaps, by the pressure of an advancing tooth,—

could anybody make a mistake?

Or we have sentences like these:

> To remove the exciting cause of irritation is not always an easy task. In many cases, indeed, it is either wholly—

now you suppose that "it" refers here to the subject, "to remove the exciting cause of irritation," or to "task," which is predicated of the former; but you shall see:

> In many cases indeed, it is either wholly inappreciable, or can only be guessed at—

and so you discover that "it" refers to the exciting cause of irritation which has not been in question at all!

But here is an obscurity of a different sort—dark *per se*, and not from 'excess of light.' Can anybody tell us what it means?

> It is notorious that the eyes, like all symmetrical organs, have an impor-

tant *sympathy*, not only with each other, but also with many other portions of the body, which displays itself both in health and disease, and not unfrequently becomes the *subject* of *irritation* and *inflammation*.

Indications of treatment become "leading facts," with Dr. Gross. Thus:

> In the treatment of irritation there are several leading *facts* which claim special attention. The first is to remove the exciting cause; the second, to correct the secretions; and the third, to palliate the disease, both primary and consecutive.

Then one of these leading facts becomes an "indication:"

> The last *indication* is to palliate, or to cure the disease. To point out the methods of doing *this* in a class of affections of so protean a character as *this*, would be absurd.

From which it seems, too, that to *palliate*, and to *cure*, are equivalent or identical!

Of the bones, we are told:

> They are a common seat of various kinds of tumors, especially the benign, some of which, as the exostoses, are *identically similar* to *their* own structure, while others are essentially different in most particulars.

And this reminds us that we we are treated to such expressions as "other similar remedies," "other analogous cases," "general vogue," "greatest verge," "moist flame," "streaked with specks," and "exhibition of display," etc

Dr. Gross has some peculiar notions about fracture beds:

> A fracture-bed must have three *qualities;* it must have slats, a good, firm, but elastic mattress, and arrangements for the evacuation of the bowels, so that the patient may not be compelled to rise when he wishes to relieve himself.

Now "slats" can hardly be said to be a "quality" of a bed, though they may impart a quality; so, what Dr. Gross means is this:

> A fracture-bed must have three qualities: a slat quality, a good-firm-but-elastic-mattress quality, and an arrangement-for-the-evacuation-of-the bowels quality—

which we recognize as admirable qualities, and we flatter ourselves that two of them, at least, are neo-Aristophanics.

"To *prevent* shortening" in fractures "constant vigilance must be exercised:"

> If any doubt exist, a comparative estimate must be made from time to time of the length of the two limbs, by stretching a piece of tape from the centre of the umbilicus to the inferior and inner border of each patella, the body and limbs lying perfectly *plumb.*

Lying plumb, forsooth! In Kentucky, when anything is plumb, it *stands perpendicular to the horizon.*

And the case of old John Rogers, of glorious and martyr memory—a case which has just been settled, too, by documentary evidence—is revived in this way:

> Twelve years ago, a man brought to me *three* of his children, *two sons*, and *a daughter*, on account of double cataract. Of his *other six* children three were affected with strabismus.

Now the question is, how many children had this man, nine, or twelve?

These volumes abound in figures of speech, verbal and otherwise. The reader is subjected to a series of explosions, which, although tropical, are absolutely startling to him if he has nerves. Germs explode, morbific impressions explode, ergot explodes, hydrophobia explodes, all sorts of poisons explode ("upon the general system," and "in the axilla)," and even a concussion concentrates and explodes upon the bones of the forearm! And this is the way it is with the germs:

> In what element of the economy the germ of the morbid action is locked up, neither reason nor experience has been able to determine: for a time it would seem to be latent in the blood, and then to *explode*, either *suddenly* or *gradually*, with *zymotic violence.*

"Zymotic violence," is fermentative violence. So "germs" explode like a barrel of beer, or like a bottle of ginger-pop!

Sometimes the author deals in metaphor. Here is one of the mixed kind:

> If we endeavor to step beyond this, we shall, like our predecessors, lose ourselves in the *mazes* of conjecture and hypothesis, those *quicksands* upon which so many of the noblest minds of the profession have, in all

ages, since the origin of medicine and surgery, been *wrecked* and *stranded*, as if to warn us of their folly and the impossibility of further progress.

"Mazes of conjecture and hypothesis," which suddenly, by a hypocatastasis, are presented as "quicksands," upon which people are "wrecked and stranded"—just as they are sometimes, actually and *tropically*, upon a trope!

A kind of sentence, at once initial and pervading, is seen here:

> He may, it is true, be an excellent operator, a good mechanic; but unless he is an able pathologist and therapeutist, he is unworthy to be intrusted with the health and life of the humblest citizen *that may be so unfortunate as to fall into his hands.*

The words in italics add nothing of grace or ease to this passage, nothing of force or completeness to the meaning—nay, they detract from the latter; for if a man is unworthy to be intrusted with the health and life "of those who may fall into his hands," he is just as "unworthy to be intrusted with the health and life" of those who do *not* fall into his hands. There is another error in this passage, of a kind eminently characteristic of this treatise: by *humblest*, the author evidently means *lowest*, or meanest, or most abject. But, even with this emendation, the notion conveyed will not do; for, when we are front to front with disease, when its treatment is in question, the skill required does not depend upon the lowness or upon the loftiness of the sufferer, upon his worldly condition; or, if it does, we may say that the lower, the meaner this condition is, the greater must be the skill.

Here is another sentence like unto the last:

> Hence, a perfectly healthy state of these organs is a matter of paramount importance in the treatment of every case of injury and disease *that may come under the observation of the practitioner.*

Is not this "healthy state" just as "paramount" in its "importance" when the "disease" does *not* "come under the observation of the practitioner?"

We thought to stop here, but perhaps it would be wrong not to give two little passages, in whose immediate neighborhood we find ourselves. The first one may be commended for the entire novelty of part of its teaching:

> Whatever seriously affects the function of the more important structures is sure, sooner or later, to exert an unfavorable impression upon the lungs, disordering the respiratory movements, and untowardly interfering with the aeration of the blood, *or the formation of oxygen*, and the elimination of carbonic acid.

And this for its—well, for its novelty, too, though somehow it does sound strangely familiar:

> The stomach, possessing a wide range of sympathy, is often the seat, not less than the cause, of severe irritation. *Food and drink are the ordinary stimulants of this organ, and when taken in proper quantity, of proper quality, and at proper intervals,* SELDOM *fail to prove wholesome.*

Let this suffice; though, in case it should not, we have an abundance of references to other, and similar, and analogous matters—matters which we have not sought out, but which have sought us out, forced themselves upon us.

Now, we repeat that we are surprised at all this! And we may well be so. Time was when we read Dr. Gross for his manner as well as his matter (we study the matter yet)—read him, to learn how to mould a sentence, how to write; for, even in our adolescence, he was a recognized authority in manner as well as matter. No—he did *not* write thus, formerly; he did not write as he has written here, when he lived in Louisville! It is only since he has been dwelling among these Philadelphia people that he has fallen into this bad habit—that he 'throws himself away' in this fashion. 'Evil communications corrupt good manners,' was said, in our pot-hook days, of what Mr. Turveydrop calls 'deportment;' and by catachresis, we suppose, it may be said of writing, of composition. Thus: These Philadelphia people, in fact, Gross's very colleagues, God bless their souls!—have been telling us for some years that physicians and medical students, with part of an education, "resorted to Philadelphia for the purpose of completing it!" Whereat we marvelled greatly! And when we saw, a little while ago, one-third of the students of this very college, the Jefferson Medical College, leaving in a body, shaking the dust off of their precious shoes, and swearing never to be caught there again, we marvelled greatlier, as we may say, we were in absolute consternation! What, we asked ourselves, with bated breath, what in the world is to become of Philadelphia now! Gracious heavens! is it never to be *completed?* Is it a going 'to keep on?' Is it a going to 'keep a keeping on?' Mercy on us!

Yes! mercy on us, indeed; for while we write (we are a little behind hand this month, but the types will warm up before we are two months older!) here comes the Philadelphia *Medical and Surgical Reporter*, for May 19, with an objurgatory jeremiade levelled at us for something which we have never said, and talks to us, with solemn gravity and lofty gesticulation, in sentences like these:

> A western cotemporary, the *Louisville Medical Journal*, in some remarks introductory to a notice of last year's volume of Transactions of the American Medical Association, indulges in some reflections on *that* body, *that*, it seems to us, are entirely uncalled for, because they are not founded in truth.
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> But any one who will read over the names of the permanent members of the Association, and who knows anything about the profession of the country, will see that *it* is composed of men of the first standing from all parts of the Union—[*qu.* the profession, or the Association,]—men who are fit representatives of the profession of the United States of America.

And so "it" means *Association!* And thus Philadelphia 'keeps a keeping on,' sure enough!

Why, these pronouns, which to us, here in Kentucky, called "western," although we are in the very heart of the Union—these pronouns, we say, which to us are sometimes stumbling blocks, seem to be to these Greeks, in Philadelphia, foolishness! They are as fatal to these Greeks, in some respects, as the pronunciation of a certain word was to the Ephraimites of old 'at the passages of Jordan'—does the *Reporter* remember?

> That sore battle, where so many died
> Without reprieve, adjudged to death
> For want of well pronouncing *Shibboleth*.

Really our dulled ears have not been so assailed by uncouth sounds (of the *periodical* kind) since the *Reporter's* weekly brother, or rather brother weekly, the *New York Medical Press*, tried to fright us in the cradle, by making faces at us, when our eyes were winking and blinking like a new born babe's, and did shock us with its horrid speech! Yet, having fairly opened our eyes, we saw that the *Press* did not talk in this way merely to shock *us;* it simply talked 'as it's most used to do.' There was its motto, staring us in the face—there is the motto still:

> Nullius addictus jurare in verba magistri!

The word may be useful to these Philadelphia people, one and all—*quod prosit omnibus*—at least it would be appropriate; for they, like the *Press*, seem to scorn these *verba magistri* literally as well as metaphorically. And may we ask here—what we intended to ask of the *Press* ere this, but really we forgot it—Why? For the sake of the *Press*, which seems to have an extraordinary familiarity with Horace, we will put the question in Horatian phrase;

> "——ea quae. . . miraris et optas,"

—or which you ought to—

> "Discere et audire, et meliori credere non vis?"

Enough, however, of the manner of these volumes; let us go now to the matter.

Dr. Gross says, in his Preliminary Observations, that "The general principles, or great doctrines of surgery being understood, a knowledge of the various topics discussed in this part of the work [special surgery] will be a comparatively easy task." "No surgeon can practice his profession with credit to himself, or benefit to his fellow creatures, if he is not an enlightened physician, or deeply grounded in the knowledge of the great doctrines of disease." "If, therefore, there is any one part of the present treatise upon the study of which I would insist more than upon that of any other, it is that which treats of the great principles of surgery, as comprised under the head of inflammation, wounds, morbid deposits, new growths, and morbid poisons."

This is good ground; and we propose to enter into a critical examination of what Dr. Gross teaches in regard to these "great principles." Thesebeing, according to his own declaration and the dictum of common sense, the foundation upon which the whole superstructure of surgery rests, it follows, that as this foundation is well or ill built by him, so his teachings may or may not be an enduring monument to his fame.

It may be affirmed, we think, that the study of surgical pathology is fruitful of good to the practitioner when he learns from that study processes as well as results, pathology as well as pathological anatomy, restorative processes as well as normal conditions. The knowledge of both sets of facts is valuable to the practitioner chiefly in so far as it will enable him to prevent, arrest, or modify the processes themselves, and through them the result. A student in fitting himself to treat a diseased organ, wishes to learn, among other things, how the condition under observation has been brought about, what further alterations will take place, what are the invisible operations by which the visible changes are wrought, as well as how the part will appear when with the scalpel it is laid bare to sight and made accessible to touch. To study inflammation at the stage of its fullest development, or at any one point in its course, with the hope of understanding its nature, would be as bootless as would be the study of an egg with the hope of learning how a chick is formed, or the study of a fœtus with the hope of learning the whole process of reproduction. The development of the chick, or of the fœtus, comprehends a concatenation of events, each of which is to be studied by itself and in its relations to the others before the whole subject can be understood. So, inflammation ought to be studied in its entirety: in the altered condition of the capillary vessels and of the blood contained in them; in the altered nutrition of the tissues involved; in the alterations of exuded matters; in the modifications of nervous endowment; in the reciprocal relations of all these, and in the relations of the diseased part with the whole organism. And, moreover, it is of the last importance that surgical pathology, while affixing a definite signification to inflammation, should also determine the amount of its agency in the production of structural disease. The latter point Dr. Gross disposes of most summarily, for he says, at the very threshold of his work:

> A thorough knowledge of inflammation is indispensable to every practitioner of surgery. It should form the principal subject of his studies during his pupilage; and the main object of his professional contemplation in after life. When it is recollected that there is hardly any disease which comes within the province of this department of science that does not originate in inflammation, or that is not more or less affected by it during its progress, the truth and force of these remarks will appear sufficiently obvious. The smallest pimple upon the nose is, in point of fact, as much an inflammation as an erysipelas that covers the face and head. An ulcer of one of the mucous follicles of the mouth does not differ, in principle, from an ulcer of one of the glands of Peyer, which are the seat of so much disease and danger in typhoid fever. Many of the maladies, vaguely called nervous, are nothing but forms of inflammation, the nature and seat of which it is often difficult, and frequently impossible, to determine. Their predominant symptoms are of a nervous character, and hence the diseases which they accompany are usually considered as nervous, while in reality the reverse is too often the case.
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> All accidents, whatever may be their nature or degree, are necessarily followed, if the patient survive their immediate effects, by inflammation. The little wound made by venesection, the incision made in cupping, and the bite inflicted in leeching, would never heal without the aid of this process; the parts would remain open, and be the seat of incessant bleeding, or they would become festering and putrid sores.

Now, waiving any remark upon the great doubt which must rest upon any assertion that a malady, "the nature and seat of which it is impossible to determine," is a form of inflammation, we think that the passage quoted contains two objectionable opinions: First, that "there is hardly any disease [surgical] that does not originate in inflammation;" and, second, that healing does not take place except by the intervention of inflammation. To each of these dogmata the author adheres with a degree of consistency in strong contrast with the usual tenor of his writings. We have searched through the book in vain for any plausible proof of the correctness of the one or the other of these opinions. They rest after all upon his own dictum, and this may fairly be confronted with the dicta of others. The dicta of almost all modern authorities are opposed to his. The natural history of the great majority of surgical diseases fails to show the agency of inflammation in their production. Does any one now-a-days suppose that cancer in any of its forms—that vascular, fatty, horny, fibrous, cartilaginous, calcareous, neuromatous, encysted, hydatic, polypoid, myeloid, enchondromatous, molluscous, keloid, eiloid, and lepoid tumors—that elephantiasis, moles, warts—that aneurisms—that calcareous and fatty degenerations—that neuralgia, rachitis, cataract, pterygium, hemmorrhoids, hydrocele, tubercle, and various other affections, have their inception in inflammation, or are in any way necessarily associated with it? We will go farther: we think that there is good reason to believe that there are many pathological changes now very generally attributed to inflammation, as phagedena, some forms of mortification, some instances of atrophy and of softening, in the production of which inflammation is in no way concerned.

As to the second point to which we refer, the following quotations will show how our author's cotemporaries agree with him:

Miller, (*Principles of Surgery*, American edition, p. 432,) says: "Wounds heal in various ways. 1, by adhesion, or union by the first intention, a process, as formerly stated, independent of true inflammation, and altogether incompatible with it." McCartney long ago pointed out the fact that in "simple adhesion" the parts unite without the participation of inflammation. Erichsen (American Ed., p. 111) says: "The conditions necessary for direct union appear to be perfect, coaptation of the cut surfaces, a healthy constitution, and the absence of all inflammatory action." Even Liston (see Gross' Ed.) admits that inflammation is not required for the healing of wounds. To the dicta of these may be added the microscopical investigations of Paget, which put the matter at rest. (See Paget's *Surgical Pathology.*)

These ideas pervade the book; they give tone and color to our author's teachings. The error they involve is no trivial one—it is cardinal; for, on the one hand, it leads to the *nimia diligentia* of practice, and on the other it keeps out of sight the real and tangible causes of pathological tissue change.

Let us now look at our author's doctrine of inflammation. If we have gathered his meaning, though we confess it difficult, Dr. Gross thinks that the essential elements of inflammation are:

I. Changes in the calibre of the capillaries: 1st, contraction; 2d, dilatation; and 3d, quiescence (?).

II. Changes in the motion of the blood: *a.* retardation of the flow, corresponding to the period of contraction of the capillaries; *b.* acceleration of the blood-flow, corresponding to the period of the dilatation of the capillaries; *c.* stagnation of the blood, corresponding to the period of quiescence of the capillaries.

The contraction of the capillaries is due to their muscularity.

The dilatation of the capillaries is accounted for by the paralysis of their muscularity, by the vis-a-tergo of the heart, and by the increase of the blood corpuscles.

In the quiescent state of the capillaries the blood stagnates; the blood corpuscles and the white corpuscles are increased in number; they become glutinous, adhesive, and cohere first to one another, and then to the sides of the vessels.

This state of things continuing, the capillaries become tortuous and elongated, and their coats lacerable. Immediately around the focus of the inflammation, congestion exists, i. e. the blood moves slowly and with difficulty; around the area of congestion there is increased activity of circulation.

In his opinion inflammation, "in its earlier stages, is one of increased action, both of the capillaries and of the tissues through which these vessels pass," but, that "when the disease is *fully established* there is every evidence of decided debility: the capillaries are paralysed, distended to the utmost with non-oxygenated blood; the different tissues are surcharged with inflammatory products; nutrition, secretion, and absorption are interrupted, or completely suspended; in short, everything is indicative of enfeeblement and prostration."

This we believe is a full and fair statement of the entire doctrine of the essential nature of inflammation.

Dr. Gross starts out with this proposition in regard to the capillaries:

> The capillaries are those minute canals which are everywhere interposed between the arteries and veins, of which, in fact, they are only so many continuations. That their structure is similar to these vessels is analogically extremely probable, although it is doubtless somewhat modified to enable them to fulfil the various duties which nature has delegated to them, since they are not merely designed as channels for the transmission of blood, but also as organs *for the elaboration of various kinds of fluids*, as those which nourish the system and those which are thrown off in the form of secretions.

We confess some surprise at meeting such a paragraph as this, written at the present state of physiological knowledge. If our author had availed himself of the labor of his cotemporaries, as in the preface he says that he means to do, he would have learned that the capillaries have no muscular coat, as the minute arteries have up to the commencement of the capillaries; that the cessation of the muscular tunic marks abruptly the boundary between the arterial and the capillary tube; and that, whatever the analogies of these tubes may be in some respects, it cannot be said of either that it elaborates nutritious fluids or forms the secretions. He does not seem to be aware of the fact that there are other forces operating in the capillary circulation than the merely mechanical powers evolved by muscular fibre. He forgets that circulation may take place in the absence of any vis-a-tergo, as in the portal circulation of man and in the systemic circulation of fishes, and even without muscularity of any sort, as in plants.

That the capillary circulation in man involves other forces than the muscular, is shown by Lebert's investigation of this very inflammatory process. That a force is evolved by the properties and endowments of the proper tissue of the part, is shown by all the analogies of physiology; and that, amongst these endowments of the tissue proper rather than of the capillaries of the part, the most essential is that depending upon the sympathetic nerve, accords with all our knowledge of the matter. If anything is needed to set the matter at rest, Ludwig's experiment with the monometer in the excretory duct of the submaxillary gland is sufficient.

Again, it is well known that the composition of the blood itself has something to do with the facility with which this fluid moves through capillary vessels. This is shown by experiment and is of necessary inference. Lehmann in his experiments with bicarbonate of potash, carbonic acid, and the alkaline proto-carbonates, produced with these substances the exact conditions of the blood and of the capillaries which exist in inflammation; and Bernard has shown us that starvation is necessary to render the divisions of the sympathetic sure of the production of inflammation. It is worthy of remark that in Lehmann's experiments with the earth-salts and carbonic acid, the arrest of the circulation took place in the capillaries, not in the small arteries and veins; that the stoppages in the circulation produced by ether were observed in the small arteries, while the capillaries were empty; also, that carbonic acid and the alkaline carbonates produced tonic spasm of all the muscles, while ether produced paralysis.

But to return to Dr. Gross: He thinks that the capillaries are obstructed by the accumulation of red and white corpuscles, especially of the latter. Bennett's answer to this doctrine is so complete that we extract it:

> It is the stoppage of the blood, and exudation of the liquor sanguinis, however, which it is most difficult to explain; for why, so long as there is no mechanical obstruction (and during this process none has ever been seen) should the circulation through the capillaris of a part cease? It has been endeavored, indeed, of late years, to account for this stoppage by referring it to a mechanical obstruction, which is supposed to result from the formation of colorless corpuscles, which cling in large numbers to the sides of the capillaries, and so cause interruption of the stream. But this hypothesis is negatived by the following facts:—1st, In young frogs, the vessels may be seen to be crowded with colorless corpuscles, while the circulation is in no way affected. 2d, In old frogs, oscillation and gradual stoppage of the stream may be seen, without any colorless corpuscles being present. 3d, The colorless corpuscles, as shown by Remak, are increased, after large venesections, in the horse, without ever causing active congestion.* And 4th, In Leucocythemia all the vessels are crowded with colorless corpuscles, and yet no active congestion in these vessels, nor exudation of any kind, takes place. (*Clinical Lectures*, *p.* 137-8.)

It seems to us that it must be evident to any thinking mind, acquainted with physiology in its present state, that in all this matter of inflammation there is something more than contractions and expansions of the capillaries, increase or retardation of the blood, accumulations of the corpuscular bodies of the blood, obstructions of the vessels, even if these be present; nay, rather that these are the

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*Diagnostische und Pathognetische Untersuchungen, &c., 1845. He also found that in man the colorless corpuscles of the blood were few in number during inflammations, and were augmented during successive bleedings, so that he concluded the *fewer* there are of these the higher is the degree of inflammation.

mere visible anatomical expressions, as it were, of the inflammatory process, mere resultant not primordial conditions; and that we are to look rather to changes in the cell life itself in the affected tissue for the initiation of the inflammatory process, as well as for the governance of its issues. To this view all pathology is advancing with steady step.

The study of pathological changes in cartilage developes the fact that in this tissue, which notoriously has no blood vessels, all the tissue changes appropriate to inflammation begin in and are wrought by modifications of cell life and development. The blood vessels in the contiguous bone are crowded with blood, and the blood is stagnant in them as in the web of the frog's foot, but there is no contact; indeed, a broad belt of tissue intervenes between the vessels on the one hand and the cartilage corpuscles on the other. Yet the cells in the corpuscles increase in number and alter in form and character, the corpuscles increase in size as well as contents; in short, starting from this point, suppuration, softening, ulceration, necrosis, and tissue transformation all occur, and yet the blood vessels stand without the portals, as it were, of all this, mere carriers of blood, obedient to the bidding of the powers within.

There is no glimmering of these truths in all our author's doctrine of inflammation. Contraction of the capillaries, followed by paralysis, is the foundation-stone of his theory—a theory that we are aware many others hold. We cannot see how it can be maintained in the face of the fact that the capillaries have no muscular tunics. True, the experiment of Bernard, in which the division of the sympathetic was followed by heat, swelling, and redness, is triumphantly quoted to sustain this view. But these enquirers forget that the sympathetic is not a mere motor nerve, that it has its most plentiful distribution to organs which have no trace of muscular fibre—that it has to do as well with cell life, nutrition, secretion, as with motion. And, waiving the question of the ability of the capillaries to contract by any power of the coats, does it follow because a section of the sympathetic permits, in favoring circumstances, inflammation to take place, involving, as this condition does, dilatation of the capillaries, that therefore such dilatation is caused by muscular paralysis, when motor power is only one of the sympathetic's properties? The very fact that starvation of the animal must first be produced ere division of the sympathetic produces inflammation with certainty, rather shows that mere muscular paralysis, if it could exist, is not all that is required for the production of the inflammatory state; rather, that the arrest of cell evolution by division of the nerve prevents, directly or indirectly, the developement of its motor force as applied to the blood in the capillaries.

Dr Gross' theory, after all, amounts to this: that from a certain change in the capillaries and contents, congestion and stagnation take place; just such congestion as can at any time be produced artificially. Mere accumulations of blood, mere stagnation of the current, mere dilatation of the capillaries, may be brought about by mechanical means. But such accumulations, stagnation, and dilatation, do not by any necessity produce the phenomena of inflammation, or the tissue changes appropriate to inflammation. Serous effusion or necrosis of the blood and tissues may result—this and nothing more.

Perhaps we have said enough on this point.

Looking at the doctrine of inflammation as our author teaches it, and granting his teachings to be correct, as far as they go, if we try them by his own standard of physiological knowledge, they will not answer. He tells us nothing of the changes which take place in the blood contained in the vessels implicated, except that the white globules are increased, and that both these and the red globules "are materially changed in their shape, being irregularly flattened, elongated, and distorted, as well as adherent to each other and to the sides of the vessels." There is no hint as to the agency of exosmosis in the flattening of the discs; nothing of fibrinous coagula, of solution of hæmatin, of the necrosis of the blood in the capillaries. The theory is vague, meagre. It embraces that which is apparent to the eye. It is purely anatomical. There is in all that is said no apparent comprehension of a process. So much as may be seen through a microscope at the full development of inflammation is told, and, though not interpreted aright, told well. But we find nothing beyond this. There is no linking together of isolated facts—no reach beyond the demonstrable—no interpretation of the invisible by the visible—no attempt to interpret the past by the present, or from the present to predict the future. The theory is mechanical, too. It recognises loss of motor power in the capillaries and increase of it in the heart and efferent trunks. It recognises stasis of blood in the one and acceleration of blood in the other. This is all. Elsewhere we meet with analogous mechanical interpretations of vital changes:

> Where or how this excess of fibrin and colorless globules is developed is still a mooted question, which it will require further observation to solve. It may be supposed, in the absence of satisfactory information, that it takes place in the arteries, in consequence of the manner in which the blood is agitated in passing through the different parts of the body, its various ingredients being forcibly pressed and rubbed against each other, and against the sides of the vessels by the increased powers of the heart. Thus a species of disintegration is brought about, which doubtless adds very greatly to the already existing excitement both of the part and of the system. The idea that attrition of the blood against the walls of the arteries is mainly instrumental in the production of the change in question derives support, of a very plausible, if not of a positively confirmatory character, from what is observed when a horse is subjected to severe exercise upon the turf. If he be bled after having been rode very rapidly round the track, it will be found that there is a great increase of fibrin and colorless globules, in consequence, apparently, simply of the increased momentum of the circulation, and the friction which the blood has experienced in its passage through the vessels, especially the arteries. Now this is precisely what occurs in inflammation: the greater the excitement of the heart, or, what is the same thing, the more intense the morbid action, the greater will be the amount of fibrin and white globules, and the reverse.

Now, it seems to us that one who has followed Dr. Gross thus far in his teachings as to the nature of inflammation, would be prepared to receive the doctrines of the school of Todd, Bennett, and others, in regard to the treatment of inflammatory diseases. If he were to stop here and ask himself, what must be the medical management of the inflammatory process? he would be forced to answer: stimulants; stimulants to excite the capillaries to contraction; stimulants to arouse the nervous force of the implicated tissues; tonics to sustain the overwhelmed and debilitated organs. Such, however, is not our author's notion of the matter. His treatment is eminently "depressant," "lowering," "depletive," "spoliative," to part and system: sedatives locally and generally; antimony and the lancet; depletion, direct and indirect. The treatment everywhere implies the idea of exaltation of nervous and muscular force, an increase of the dynamics of the implicated organs; mention is constantly made of "increased action of the vessels," and of perverted as well. It would seem as if Dr. Gross, the medical philosopher, had one conception of inflammation, and that Dr. Gross, the practitioner, had another. The two authorities are antagonistic. The practice of the one does not quadrate with the theory of the other; not only does not quadrate with it, but by implication scouts it. If one as humble as ourselves might venture to side judicially with either of these contradictory authorities, we must confess that we hold to the practioner. The practitioner we take to be the better man; for much of the practice is good, though, as will be seen hereafter, we cannot say as much for the rationale of it. But here it is:

In keeping with the constantly recurring idea of "morbid action" the treatment which is recommended includes almost every one of the heroics in such case made and provided. Dr. G. places blood-letting at the head of the list. In this we agree with him, if it is understood that the practice is to be confined to the eastern slope of the Alleghanies; but as applied to the treatment of inflammatory affections in this valley, or in any malarial region, we, in common with every practitioner in such region, must enter our protest against the free or frequent use of the measure. The general directions as to the method of venesection, and the extent of bleeding, are, in the main, well-timed, judicious, and for students useful; except, perhaps, the caution which it is thought necessary to give in cases where prolonged fainting results, viz: that "no stimulants are to be given by the mouth unless it is certain that there is still some power of deglutition."

Next follows a chapter on *Cathartics*. Dr. Gross would have us give cathartics, when at all admissible, with five different purposes: 1st, to empty the bowel; 2d, to deplete; 3d, to excite the liver and mucous follicles; 4th, to produce revulsion; 5th, to stimulate the absorbents in all parts of the body. Waiving all objection to the *methodus medendi* implied in the preceding lines, we are ready to endorse fully the clinical excellencies of cathartics in many inflammatory affections though not in all: and if Dr. G. had had seen fit to stop at this point it would have been well. But in speaking of the third purpose for which cathartics are to be given, viz: the excitation of the liver and mucous follicles to increased secretion, he says: "Hence remedies calculated to restore, modify, or improve the secretions of these several structures constitute important *objects* of treatment, not only as preventives, but as means of cure." And on the succeeding page he tells us, that "cathartics must not be exhibited merely with the view to the correction of disordered alvine evacuation. Such a procedure could not fail to prove injurious. The action of these remedies is perturbating, and therefore subversive of healthy function." The subject is concluded with the announcement that castor oil, rhubarb, and jalap, are evacuants; that salines produce watery passages; that calomel, blue mass, and gray powder, act specifically upon the liver; and that colocynth, scammony, gamboge, and aloes, produce upon the bowels irritation, revulsion and metastasis!

Mercury is a great remedy with our author. He says: "Its virtue in controlling inflammation is hardly inferior to that of the lancet and of tartar emetic. * * It may, therefore, be given during the height of the malady with the view of arresting its progress." This passage occurs near the bottom of page 106, and in the succeeding paragraph he says: "There is a mercurial point, so to speak, in inflammatory affections. * * Administered during the height of the morbid action, when the whole system is enveloped, as it were, in a flame, it [mercury] can hardly fail to act as an irritant, and to increase the general excitement. For want of attention to this rule, a great deal of mischief is often done." In the next paragraph he says: "That it affords powerful aid in controlling the action of the heart and vessels both large and capillary, is unquestionable." Here he tells us that mercury is but "second to the lancet and to antimony" in controlling inflammation, and is therefore to be "given during the height of the malady;" but, if "administered during the height of the morbid action," "it cannot fail to act as an irritant and increase the general excitement." Can the reader fix the "point" in inflammatory affections at which mercury is, in our author's opinion, to be given? We confess that it is too *mercurial* for us.

Yet, upon a review of all our author says of the matter, it appears that he thinks mercury is to be given as a depressant, and when the inflammation is most severe; for he says "where a prompt and powerful impression is desired, as when there is high inflammatory action, * * the medicine should be given in large and frequently repeated doses," i. e. " three or five grains every three, six, or eight hours;" and this, mark you, reader, not for its purgative property, nor for its depleting property per purgation, but to produce "a prompt and powerful impression" "when there is high inflammatory action likely to prove overwhelming in its effects." We have heard of a great many things, good and bad, that calomel has done and can do, but we do not think that we ever heard it claimed by the most zealous of Cooke's disciples, or by any one of our "silly forefathers" who, according to Dr. Gross, used the remedy so heroically, that three or five grains of calomel, given every three, six, or eight hours, would produce "a prompt and powerful impression" in "high inflammatory action, likely to prove overwhelming in its effects," unless indeed the medicine purged the patient sharply—and not always then.

We have been taught that the essential agency of mercury apart from its purgative action is manifested in its so called antiplastic property, in preventing on the one hand fibrinous effusions, and, on the other, in procuring the absorption of these. Of the former we see no mention in this part of the work, although the idea beams out in the second volume, while speaking of the treatment of iritis. Of the latter, or the "sorbefacient" property, full cognisance is taken, and the use of the remedy for this purpose is everywhere insisted upon. It is reccommended in almost every variety of exudation, certainly in all the solid exudations, whether in the substance or on the surface of tissues. That the drug is efficacious in procuring the absorption of inflammatory products in the substance of organs, is amply proven by all clinical observation, but we doubt if the efficacy of the remedy is marked in procuring the liquefaction or expulsion of membranaceous exudations upon mucous surfaces. Experience does not speak in the rapturous terms of our author of the efficacy of calomel in the false membrane of croup, laryngitis, tonsillitis, etc.

Neither do we think that the selection of diseases with reference to the especial value of mercury in their treatment corresponds with the experience of most practitioners. We doubt if our readers will agree with Dr. G. that mercury is of "conspicuous efficacy" in "gout," "laryngitis," "splenitis," "arteritis," "osteitis," but less so in "nephritis and metritis." So also the use of the drug in "glandular enlargements," "chronic affections of the joints," and "tertiary syphilis," is open to may objections.

Dr. Gross lauds the efficacy of *Depressants.* His object in using them is, "by lowering the action of the heart," to "lessen the momentum of the circulation and diminish the flow of blood to the affected tissues." For this purpose, "the most trustworthy depressants are tartar emetic and ipecacuanha (!), to which may be added aconite, veratrum viride, and digitalis, which, however, hold a subordinate rank"—to ipecacuanha!

Diaphoretics, he thinks, constitute "a highly important class of remedies in inflammation ." That they are sometimes of service is doubtless true, but we doubt if the American practitioner would place much dependence upon them in such inflammatory diseases as the surgeon is called upon to treat.

Dr. Gross regards *Anodynes* as capable of "affording immense benefit" in many inflammatory affections. If he means opium we will agree with him. But we are loth to concur in the opinion that even opium "cannot be too highly appreciated in the phlegmasias of the skin and cellular tissue," "the pleura and respiratory organs." We think there are few physicians who place Dr. Gross's estimate upon the value of opium in pneumonia aud bronchitis. We are inclined to think that in almost all stages of pneumonia, except the commencing, the remedy is to be avoided, and we hardly believe that Dr. Gross himself would prescribe it in acute bronchitis. But what will the reader think of the reasons which our author gives for the administration of opium in pleurisy, pneumonia, and inflammation of the brain? One of these reasons is the fact, as he alleges, that the drug keeps the respiratory organs still, and prevents the brain from thumping too hard against its case: "Anodynes, in most of these cases, as well as in many others, literally constitute nature's splint."

We have now passed cursorily over the gist of our author's constitutional treatment of inflammation. We are forced to the conclusion from a careful study of this, and even with a free and charitable construction of it, that much of it is incorrect, and by no means consonant with the present state of medical knowledge. Dr. G. nowhere points out clearly when and for what purpose is to be given any one of the numerous remedial agents which he mentions. He does little more than tell us that bleeding, mercury, depressants, diaphoretics, diuretics, cathartics, and anodynes, are useful in inflammations—all of which is as much to the purpose as to say: Sirs, here is a list of remedies embracing most of the materia medica; almost all of them are good; pick and choose for yourselves.

Dr. Gross has written this book avowedly to the end that in it the practitioner should find "an available guide in the daily routine of duty." We submit that it by no means serves its purpose. It is vague in its meaning, contradictory in its statements. In the perusal of it up to the present point, at least, the reader is often puzzled as to the author's exact meaning, and when by dint of study he has mastered this, he finds to his consternation, in the next paragraph, a statement wholly inconsistent with what has gone before, if, indeed, it is not in direct contradiction. A guide to the practitioner, to be available, should above all things be clear, consistent, correct, and plain—and this book, thus far, is neither.

The local remedies which our author advises us to use, are, 1st, rest and position; 2d, local bleeding; 3d, cold and warm applications; 4th, fomentations; 5th, styptics; 6th, poultices; 7th, nitrate of silver; 8th, iodine; 9th, compression; 10th, counter irritants.

Nitrate of silver and iodine are great favorites with the author. He lauds the efficacy of the former in every disease accessible to its application; and he thinks that iodine is hardly less valuable: "Its great value seems to consist in its alterant, sorbeficient properties, changing the action of the capillary vessels and promoting the removal of effused fluids." Now, we are certain that there are some diseases accessible to nitrate of silver, which are by no means benefited by its use; and that iodine has never worked such wonders in any body else's hands. Dr. Gross does not advise the use of the latter as a counter-irritant. He especially warns us not to have it strong enough to excite capillary action; and yet he has seen "a single application often sufficing to produce the most marked change in the condition of the part" in "boils, carbuncles, whitlows, corns, bunions, inflamed irritable ulcers of the extremities," and in "œdema of the uvula and tonsils (?), the legs, scrotum, prepuce, and pudendum."

Under the heading, *Counter-irritants*, he mentions first, and lays great stress upon "*destructives*;" i. e., remedies which "the surgeon employs to *destroy* the germs of certain diseases, as that of chancre, hydrophobia and malignant pustule; and to neutralize certain poisons, as that of the snake and the dead subject." This is certainly a novel interpretation of counter-irritants. In such a sense as this an amputation of the poisoned limb would be a counter-irritant.

It will be seen from the comments and extracts which we have already made that Dr. Gross, while he starts out with the limitation of inflammation to that condition immediately antecedent to effusion, and independent of the latter, yet treats inflammation constantly with reference to the products of the process. This would be commendable if inflammation were admitted by him to embrace its products—but it is not. He over and over again tells us that inflammation is often fatal without the occurrence of any effusion. Yet in the treatment of it, in the sense to which he restricts the term, he constantly mixes the inflammation itself with the effects of the inflammation. If we are to treat the pathological condition in its totality—by the light of its past and with reference to its future conditions—then why not speak of the process, and teach it, as a continuous, progressive process, "liable" to interruption, arrest, or change, "prone" to certain results in given conditions?

We pass over the article on chronic inflammation, and come to Chapter IV, on the "*Termination and Results of Inflammation.*"

Section I, treats of *Delitescence and Resolution.* By delitesence our author seems to mean the "absconding" of the inflammation, the sudden disappearance of the disease—the immediate restoration of the part to its natural condition; and, in illustration, he mentions the vanishing of a bubo under methodical compression, and the abortion of a gonorrhœa. By resolution he expresses "the gradual dissipation of inflammation after the disease has made some progress and done some mischief, *but before it has reached the suppurative crisis*, or committed such ravages as to prevent the affected tissues from regaining their original properties. With such an issue effusion of serum and lymph is not at all incompatible; * * * * a similar remark is applicable to *pus*, provided there is no abscess." Does the reader understand how pus can appear in a part before it has reached the suppurative crisis? We confess the problem transcends our comprehension. In further explanation of the method of recovery, or the way in which resolution takes place, we are told:

> The absorbent vessels, kept in abeyance by the vascular action and the effused fluids, are slow to resume their functions; they act at first hesitatingly, as if afraid to enter upon their labor, but as the work progresses they acquire confidence, and, at length, setting about it in good earnest,

> they ere long finish thei rtask, drinking in, as it were, all that their oppessors, the secernents, had previously poured out — * *

We respectfully submit that all of this sounds rather more like the notions of our "forefathers," than what we would expect in a work which purports to be the embodiment of the results of "a large personal experience, of extensive reading, and of much reflection," and in which free use is made "of the labor of my cotemporaries." These ideas pervade the book. These mythical secernents are invoked on all occasions. These ravenous absorbants are constantly sucking at all things, alive and dead, clean and unclean; attacking, in their furious voracity, solids as well as fluids; appropriating all things to their insatiate maws, leaving the veins nothing to load themselves withal; and never moderating in their rapacity except when choked off for a season by "their oppressors, the secernents!" This may have been the case in the times of our "forefathers;" but, *tempora mutantur, nos et mutamur in illis.* The absorbents in these latter days content themselves with fluid food, and share their frugal meal with their neighbors, the veins, while their oppressors, the secernents, no longer enter into the constitution of men, as these are made now-a-days.

The reader must not rashly fall into the belief that Dr. Gross really means, in the foregoing section, to dispose of the matter of inflammatory deposits: Section II, treats of the *Deposition of Serum.* He regards every dropsy, every anasarca, every œdema, every serous infiltration—in short, every collection of serum, as the result of a previous inflammation. He says:

> Much diversity of sentiment has been expressed in relation to the kind of action by which this fluid is produced; some declaring that it may be deposited without the aid of inflammation, while others maintain that it is invariably the result of this morbid process. I have long been impressed with the truth of the latter doctrine, and have strenuously advocated it in my writings, as well as in the lecture room, for the last twenty-five years,

> It may be questioned whether mere congestion is capable of producing serous effusion. At first sight such an occurrence would seem to be quite probable; but a careful examination of the subject soon dispels the illusion. Permanent obstruction of the abdominal cava will cause ascites; not from congestion of the vessels of the peritoneum, but as a consequence of its inflammation, the results of the previous vascular engorgement. It is easy to see that vessels habitually distended, must soon take on incited action, followed by abnormal deposits. * * * *

Here for once is a doctrine fairly and pointedly stated. We do not propose to discuss the propriety of our author's views in this matter. They are so totally at variance with those of every writer with whose works we are familiar, so completely at variance with commonly received opinions, as well as with common observation, that we let the doctrine pass for what it is worth, and will only direct the attention to Dr. Gross's complete abandonment of his own dogma, if we may rightfully infer a surgeon's pathological views from the treatment which he recommends—*argumentum ex remedio deducere conceditur.* The following is his treatment—we quote the whole of it:

> In the treatment of serous effusions, the main indication is to promote the absorption of the offending fluids by the use of hydragogue cathartics, diuretics, and mercurials, followed, when these means fail, by a puncture for *their* efficient evacuation. The most important cathartics, after thorough purgation, are jalap and bitartrate of potassa, citrate of magnesia, and elaterium, given in doses proportioned to the strength of the patient and the tolerance of the stomach and bowels. These remedies, as well as others of a kindred nature. produce their beneficial effects by establishing a drain upon the serous capillaries of the alimentary canal, which leads indirectly to the absorption of the serous accumulation. When mercurials are required, as they will be when there is obstruction of the portal circle, with deficiency of the biliary secretion, the most eligible articles will be calomel, blue mass, or corrosive sublimate, either alone or in union with elaterium, squills, digitalis, or antimony, according to the nature of the collateral disorder. Deficiency of the renal secretion must be met by suitable diuretics.
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> When the accumulation of serum is very great, as in cases of dropsy of the chest, abdomen, or pericardium, all internal treatment will be likely to prove abortive, from the fact that it is generally impossible, under such circumstances, to arouse the absorbents to a sense of their duty; the

> pressure of the fluid keeps them in a crippled and paralyzed conditton, altogether incompatible with the healthy exercise of their functions. Hence, instead of wasting our time and the strength of our patient, as is unfortunately often done in such cases, early recourse should be had to an operation with a view of affording vent to the pent-up matter. I am certain, from frequent observation, that serious and even fatal errors are constantly committed by practitioners from their indisposition to early interference with the trocar in these accumulations. They forget that their purgative, diuretic, and alterative remedies, if available at all, can prove beneficial only at the expense of much distress and exhaustion of the system, which too often leave the sufferer, in the event of his recovery from the disease, with shattered and broken health for years afterwards, if not during the remainder of his life. An operation, on the other hand, generally affords prompt and efficient relief to the urgent symptoms, and places the part in a condition to be influenced by sorbefacient measures.
>
> Local remedies are available chiefly in serous effusions in the external parts of the body. In œdema of the extremities vast benefit is often derived from steady and persistent elevation, and regular, equable compression with the bandage, extending upwards from the distal portion of the limb. In this way support is given to the capillaries, while a salutary stimulus is imparted to the absorbents, well adapted to rouse them into action. This treatment often derives important aid from frictions with sorbefacient unguents, liniments, and embrocations, and the application of the dilute tincture of iodine. When the distension is inordinate, or threatens to eventuate in gangrene, early punctures and even free incisions are called for. In œdema of the glottis nothing short of prompt and decisive scarification will prevent suffocation.

If the reader were to peruse this quotation by itself, and in ignorance of those directly preceding it, we do not believe that it would ever enter his head that Dr. Gross is speaking of a diseased condition induced by inflammation. It cannot be urged that the treatment indicated above could have reference to the product alone. Dropsies are progressive not stationary; serous accumulations gather volume continually; at least the most of them do so. Now, since the serum continues to accumulate, the pathological condition upon which it depends must be continuous. If dropsies depend upon inflammation, would it not be proper, after the accumulated fluid has been removed, to bleed and purge and blister, to give calomel, diuretics and diaphoretics, in order to prevent reaccumulation? Dr. G. does not seem to think so; and he even goes so far as to remind the reader that purgatives, diuretics, mercurials, etc., may do harm, and great harm, if persevered in; yet the prohibited remedies embrace those which he especially lauds in inflammation.

The truth is, that the heresy we have just commented on is one of Dr. Gross's pet notions, imbibed doubtless from some of our aforementioned "forefathers". He defends it warmly, as if in this, as in other matters, he were determined to accomplish a victory "at all hazards present or future."

The next article is on *Fibrinous Exudation*, or "Lymphisation," as our author insists upon christening it. Dr. Gross, in this article, appears to be as much behind the age as in the chapter preceding. His statement of the subject is meager, anatomical, so to speak. We look in vain for an explanation of the qualities of lymph; the circumstances which influence its destiny for good or for evil; the reasons why in one set of circumstances it is organized, in another is stationary, and in still another becomes degenerate or diseased. Dr. Gross does not admit that lymph differs in its original or essential qualities. The omissions we have here pointed out constitute a vital defect. If there is a subject, in this whole matter of inflammation and its consequences, which is of superior practical import, which overrides and dominates all others, that subject is lymph, its exudation, organization, absorption, and disease or degeneration. In the control of these, in the management of these, the surgeon exercises often his highest and most useful function; and a treatise which ignores the most essential facts in relation to them, and which is erroneous in regard to others, is far from being a faithful guide to the practitioner—of surgery especially. Dr. G. says that lymph is effused most copiously in good states of health, but may be wanting entirely in low or depraved states of the system. The very reverse of this is true: Low or depraved states of the system are those, above all others, in which the inflamed parts are deluged with lymphatic effusion. It is in epidemic erysipelas, peritonitis, diptheritis, that effusions are most copious; it is in the cellulitis, the erysipelas, the traumatic inflammations of the drunkard that the tissues are drenched with effusions—at least, so says common observation, and the testimony of all modern pathologists of renown. Dr. G. tells us, also, that lymph may be absorbed "after it is changed into blastema and fibro-cellular tissue." We have always supposed that lymph is blastema itself; and we do not believe that the absorbents can attack and destroy fibro-cellular, or any other solid organised tissue.

In the article on *Suppuration* Dr. G. remarks "that pus when first *effused*," etc., etc. From this passage we infer that he holds to the doctrine that pus is secreted by the blood vessels; we might quote many sentences in which the expression is used. Thus, in speaking of abscess, he observes "when the matter is *poured* out into a natural cavity," "while the process of deposition is going on, plastic matter is *poured* out at the periphery," etc., etc.; and yet every now and then he lets fall an expression from which one might suppose that he recognises the fact that lymph is changed into pus after its extravasation, or, in other words, that suppuration is extravascular. The truth is that Dr. Gross writes here and elsewhere as one who had formed or adopted certain opinions early in professional life, and, although 'almost persuaded' of their fallacy, almost convinced, cannot for the life of him fully and freely abandon them. Hence his written opinions vacillate; still, on the whole they appear to settle where he first began. This is for no lack of reading or of study, as his writings everywhere unmistakably evince. Few men in this or in any other country have been more laborious students. They may have studied with better purpose, and more fruitful result, but not more industriously and extensively. But Dr. Gross's writings show, we think, that he has not studied in a broad, liberal, catholic spirit, with a mind open to the truth, ready to seize it

> —— wherever found,
> On Christian or on heathen ground.

In this article on *pus* there is a scattered, uncertain sort of description of the process of suppuration. Yet there is no clear, marginated setting forth of the circumstances forming or hindering suppuration, of the influence of quantity and quality of lymph, or even of quantitative or qualitative morbidness of vascular "action;" there is no explanation of the conflux of pus cells, or of how the part is excavated at the site of an abscess; there is nothing said of the solvent properties of true pus, of its antiseptic properties, of its power of resisting putrefaction in itself; there is no clear distinction drawn between true or laudable pus on the one hand, and the various kinds of so-called pus on the other; there is almost nothing told of the reaction of pus and its congeners upon the containing parts and upon the system at large; there is no explanation given of the process of pointing, and an incorrect one of the formation of the fibrin barrier, and the pyogenic membrane.

These omissions are fatal to the integrity of the description. The life of the patient, in many inflammatory diseases, hinges upon the question of suppuration. In such the physician's power for good is exhausted in preventing the formation of pus. If the formation of pus depends upon some peculiar "morbid action of the vessels" we ought to know what that action is; if upon the quantity of the exudate, or upon the quality of the exudate, we ought to know *it;* or if upon the concatenation of all these causes, or the conjunction of two of them, we ought to know this. Our author falls short of his promise when he fails to tell us; for it *is* known how suppuration takes place. If he had studied the works of his cotemporaries, with a disposition to listen to their teachings, he could have told us how abscesses "point;" how pus excavates tissues; how the fibrin barrier is formed; what the qualities of pus are; and what effects are produced upon the containing parts and the system at large by purulent compounds. An author who systematically rejects all that to him is new; who hugs his own early opinions closely to his bosom; who will be convinced of nothing that jars with his preconceptions—can he write a treatise that should be placed, as the author of this would fain have it placed, among the penates of the practitioner of surgery?

We have now gone through with the subject of Inflammation. It was our intention to speak of other matters which we find here, but the length of this paper precludes us, at least for the present. We may make these matters the subject of a future article.

Abstracts and Selections.

On the Employment of Tannin in large doses in Albuminous Anasarca. By Dr. P. GARNIER.—Although the internal use of tannic acid is still very limited in France, its employment in large doses has been much recommended lately in other countries, and has been extended to numerous cases which, while proving its innoxious character, appear to exhibit it as possessing some totally new properties. It has been shown to be useful in all cases where it is required to arrest hemorrhages, to give tone to the organism, or to remedy morbid secretions. It has been employed, for example, with great benefit in albuminuria, diabetes, and serous infiltrations.

From these considerations, Dr. Garnier has been induced to employ tannic acid in the albuminous anasarca, consecutive to scarlatina; and he adduces several cases illustrative of this mode of treatment, drawn from his own experience and from cases recorded by other physicians. The cases all prove that in the general serous infiltration of the tissues complicated with albuminous urine, there is a rapid and simultaneous disappearance of these two morbid phenomena under the influence of tannin alone, administered in a large dose. The conclusions drawn by Dr. Garnier are that tannin, employed in doses of two to four grammes a day (half a drachm to one drachm a day) cures anasarca or œdema developed passively and occurring simultaneously with albuminous urine; that its curative action is manifested by abundant urine, gradually resuming its physiological characters, by perspiration, easy alvine evacuations, return of appetite, &c.; that these signs appear from the second day of the administration of tannin; that given in solution in doses of twenty to fifty centigrammes at a time, tannin causes no unfavorable symptoms affecting the digestive passages; and lastly, that the action of tannin appears to be exerted primarily upon the fluids of the economy, the albuminous principles of which it coagulates and renders plastic, and that its consecutive action on the solids appears to be tonic and astringent.—*Brit. and For. Med. Chir. Review, July,* 1859, p. 241, from *Braithwaite's Retrospect.*

Products of Sloughing Wounds.—Dr. F. Crace Calvert has made some researches with the view of ascertaining the nature of the products given off from sloughing wounds, and more especially in hope of throwing some light on the nature of the contagion known as "hospital gangrene." He fitted up some apparatus to condense the various products given off from such wounds, but the quantity obtained was so small, that he deemed it advisable to collect the product given off from a large quantity of meat during putrefaction; and he found these to be quite of a different nature from what has been hitherto generally supposed. For instance, he found that no sulphuretted nor phosphoretic hydrogen was given off, but, on the contrary, alkaloids containing the sulphur and the phosphorus. —*Med. Times and Gaz.*

Anaplastic Cure of Gastric Fistula.—About two years ago a remarkable operation for polypus in the œsophagus was successfully performed by Mr. Middeldorff. This gentleman is one of the most distinguished and laborious surgeons of Germany. He reports a new case of no less interest, which is we believe the first authentically on record, in which fistula of the stomach has ever been completely cured by anaplasis.

The patient was a woman 47 years old, and her disease, which commenced in early life, was originally caused by a contusion on the left hypochondrium. She had suffered acute pains in this region from her twentieth to her thirty-second year. A new contusion then gave rise, on a level with the costal cartilage, to the appearance of a tumor which was small at first, but continued gradually for eight years to enlarge. It at length terminated in the production of an abscess, which burst twenty years after the first invasion of the pains. A fistula of the stomach followed. Palliative treatment was at first adopted with bandage, and at length, in 1857, a plastic operation was attempted with a view to a radical cure. At the end of eighteen days there was a discharge from the wound, which remained closed from the thirty-fifth day to the sixty-ninth day after the operation. Then the pain returned, and a very constricted aperture was visible at the point where previously was the fistula. By the application of nitrate of silver obliteration was effected. At the close of this treatment a minute opening remained which was easily closed by a small piece of adhesive plaster. The pain then totally disappeared, and the general health of the patient improved.—*N. Y. Medical Press* from *Gazette Hebdomadaire.*

Dr. J. Hall Dani has communicated to the London Obstetrical Society a case in which he succeeded in removing from the uterus a fibro-plastic tumor which was extensively adherent to the walls of the organ, by the process of enucleation.

Movable Kidneys.—Mr. Hare (*Med. Times and Gazette*) has collated forty cases of movable kidneys. 87 per cent. were females. It seems that the right kidney is much more liable to displacement than the left. The following case, the author remarks, is a good example illustrating the usual appearances attendant on dislocation of the kidney:

> The abdomen was moderately flaccid, by no means unusually prominent, symmetrical: an aortic impulse could be slightly seen a little above the umbilicus, and could be very strongly felt from the epigastrium to below the navel; the impulse forwards was unaccompanied by any notable lateral dilation. The liver did not extend beyond the normal limits. On the left side of the abdomen a mass was very distinctly felt lying between the costal cartilages and the crista ilii, and extending to within a short distance of the latter; it was of a kidney shape and size, with its long axis almost exactly parallel with the median line of the body; but it was situated much further from the spinal column than is usual with the kidney; it was hard and smooth; its position was somewhat altered (depressed) by a deep inspiration; it was easily moved by the hand, when it sometimes slipped upwards into the hypochondrium, and, when there, it filled a space just under the last rib, into which, when it was detruded downwards, the ends of the fingers could be to some extent pushed or tucked. It was movable downwards to the extent indicated in the woodcut, and so could be made to rest upon the lower part of the aorta. When she turned upon the right side the mass also fell towards the median line upon this vessel, so as to receive a strong impulse from it—an impulse or apparent throbbing of the tumor, which immediately ceased by alteration of position, etc.: when pushed downwards the longer axis of the mass assumed a much more horizontal direction. On further examination I found a mass or tumor, presenting exactly the same physical characters, in the right side of the abdomen only that it was somewhat less mobile, and assumed, when detruded downwards, less of a horizontal position.

To this may be added the description of the post-mortem appearances of a case presented to the Pathological Society of London, by Mr. Durham:

> The specimen, a left kidney, was still *in situ*, the whole trunk of the subject being placed on the table. No history was attainable, as the specimen was from a dissecting-room subject, of whose symptoms previous to death no clue could be got. Mr. Durham showed the relation of the peritoneum o the kidney. Its position could be raised very extensively. It could be raised as high as the spleen, and downwards it extended into the iliac fossa. It could also be made to encroach at the middle line a little on the right side of the abdomen.

Conjunctival Neuralgia.—Ocular and periocular neuralgia are common enough, but M. Jobert calls attention to a form but little known and ill-described, which he terms *conjunctival.* and which was described by Lisfranc under the name of *nervous ophthalmia.* It is very often met with in infants at the breast, and in children from two to five years of age. It is also pretty common in the adult; but is never seen in the aged. It generally affects persons of nervous constitution. It is usually quite suddenly developed, damp, cold, or a current of air often acting as the determining cause. In most cases both eyes are affected. The pain is the predominant symptom, and is insupportable. In persons otherwise quite well, a most remarkable amount of photophobia is observed, the patient seeking complete darkness, and shrieking on the admission of light. There is tenderness on pressure of the eyelids, and these are sometimes infiltrated: but the most important fact is, that, with all this, the media of the eye continue quite transparent and the cornea is unaffected, the conjunctiva only presenting a slight rose tint. There is always discharge of tears, but none of the signs of inflammation exist in these cases. The neuralgia may disappear after five, six, or seven days, and sometimes suddenly, but when it is more persistent it may lead to a real conjunctivitis. The most varied means of treatment have been resorted to, as electricity and electropuncture, opiates, antiphlogistics, purgatives, and anti-periodics. In the patient who formed the subject of the lecture, the disease had shown great persistence; and the occlusion of the eye, by means of charpie dipped in white of egg well beat up, which M. Jobert has known to be used in several instances, was here of no avail. He has entirely given up as useless, in these cases, setons, blisters, and the like. The excision of a small portion of the conjunctiva gives relief, but only for a time. In some cases periorbital cauterization has been followed by amelioration. Two important facts are to be borne in mind:—1st. The utter inutility of antiphlogistics; and, next, that by far the most efficacoius means, and which almost constantly succeeds, especially in the case of young children, is dropping some tincture of opium or henbane together or separate, several times into the eye daily. In young children the pain is thus relieved with a truly remarkable rapidity.—*Medico-Chirurgical Review*, from *L'Union Medicale*, 1859, *No.* 77.

A New Cure—The Montyon Prize.—An interesting document has just been published in the *Journal of Public Instruction* at Paris. A poor governess, named Cleret, has discovered a supposed cure for the deaf and dumb. A commission, appointed to inquire into the matter, has reported rather favorably to the Minister of Instruction.

The method employed by Mademoiselle Cleret consists in introducing sulphuric æther into the aural conduit, in doses of four to eight drops a day, for about twenty days, when the application is suspended for a short time and again recommenced. The report declares the subject to deserve attention, and that the experiments made have clearly proved the innocuous character of the application. Mdlle Cleret discovered the supposed remedy by accident. She had been deaf for several years, and chanced to find a leaf from an old geographical work, in which it wat stated that the native of a certain country made use of various substances to cure deafness. She then commenced operating upon herself; but having no chemical knowledge, she suffered much pain and disappointment before she hit upon the substance in question. A painful interest is thrown around the matter by the fact that the unexpected good fortune produced by the reception of the discovery—which was rewarded by the French Academy with the Montyon Prize—has unhinged the intellect of the poor governess, who is now under treatment in an asylum. Twenty-nine deaf and dumb children have been treated after the method indicated, and all have improved, though not in equal degree; and some adults have also derived considerable benefit.—*Medical Times and Gazette.*

Case of Multiple Exostoses with Ossification of Fascia in various parts, and Icthyosis. (Under the care of Mr. Hutchinson, Metropolitan Free Hospital, London.)—J. H., a boy of about twelve years of age, was admitted on account of the following very singular state of things. He had previously been a patient at several other Hospitals. In the left upper extremity the shoulder, wrist, and carpal joints were firmly anchylosed. The left humerus was shorter than its fellow, and running down its whole length on the outer side was an irregular ridge of bone, which projected about two inches below the end of the outer condyle, Over this ridge the skin was adherent to the bone, and was thickened, and in a condition much resembling certain forms of icthyosis. The motions of the elbow-joint were much impeded. In the fascia of the forearm were large plates of bone, two or three inches in length, and amongst the tendinous structures of the palm was a large nodular mass. Several small isolated deposits of bone were scattered about the fingers and beneath the skin of the back of the hand.

In the right extremity, the morbid conditions were not so extensive as in the left. There were nodular growths about the bones of the elbow, and large plates in the fascia above and below that joint. Some of them were easily moveable from side to side, being, however, five or six inches long by two broad. One of them extended over the internal condyle downwards, and was attached to that bone, overlapping the inner aspect of the elbow, but permitting of motion.

With regard to history, it was stated that the midwife who delivered his mother, observed the deformities immediately after the boy's birth, and that when three weeks old he was placed under care on account of them at the London Hospital.—*Med. Times and Gazette*, March 31, 1860.

Grease an Antidote for Arsenic.—M. Blondlot, of Nancy, France, has called attention to a very curious toxicological fact, namely, that greasy matters have the power of diminishing, considerably, the solubility of arsenious acid, either in pure water, or in acid and alkaline liquors. Thus, in contact with the grease, the poisonous properties of arsenious acid are very much decreased, and at the same time, it becomes more difficult to render its presence evident by chemical reactions. A very slight quantity of greasy matter, according to M. Blondlot's experiments, reduces the solubility of arsenious acid to one-fifteenth or one-twentieth of what it is in a pure state. This explains why arsenic, taken in the form of powder, remains some times for a considerable interval in the body without producing injury; it explains also how it is that, in cases of poisoning by arsenic, this substance has not been readily detected in such portions of the body or the aliments which contain much grease. It seems to teach us, also, that cream, for instance, is an excellent antidote for arsenious acid. Morgagni tells us, in his writings, that in his time, the Italian boatmen used to astonish the bystanders by swallowing, without hurt, large pinches of arsenious acid, having taken the precaution beforehand, of drinking a quantity of milk, or eating some greasy matter. As soon as the public had retired, they got rid of the poison by vomiting.—*N. Y. Medical Press* from *London Photographic News.*

Torticollis following Rheumatic Fever.—Wry neck is a deformity usually observed as the result of spasm of one sterno mastoid muscle, arising from some particular cause, and when presented to our notice is commonly chronic, although it is known to come on suddenly in weekly children, whose general health is much disordered. In the majority of cases the head is bent towards the right shoulder, and the face turned the opposite way. This is the direction taken by the deformity in a boy, aged fourteen, who was admitted into the London Hospital on the 16th ult., under the care of Mr. Curling. The interesting part of his history is that up to four months before he had nothing the matter with him, although his aspect is delicate and strumous. He was then attacked with severe rheumatic fever, during the continuance of which appeared the torticollis in the direction described, and it was so complete that the chin was drawn downwards almost to the clavicle. On his admission it seemed probable that there was strumous disease of the ligaments of the spine, and possibly of the cervical bones, but the latter seemed to be doubtful. The features had not become distorted, as in chronic cases, because the period of the duration of the disease was as yet too short to affect them. Mechanical extension was employed by means of gutta percha and chamois leather, and two weeks after, the chin was considerably elevated, although the extreme wry neck still present, as well as considerable thickening of the structures in the right side of the neck, as if from strumous infiltration. He is taking cod-liver oil with advantage, and a mixture of solution of bicloride of mercury (one grain to the ounce) in infusion of cascarilla, the extension being at the same time continued.—*London Lancet.*

Chlorosis as a Cause of Venous Obstruction.—We have here a case, interesting far beyond its rarity, from the relations, both scientific and practical, which it and its congeners have for some time suggested to me.

The patient, a young woman of twenty-two, came in three weeks ago, with symptoms of extreme prostration and debility, attended with dyspnœa, palpitation, and slight cough. Her menses, scanty from the very beginning of her illness six or seven months ago, had for the last four periods ceased. She was thought, she told us, to be consumptive by one physician; was accused of diseased heart by another. A few days before admission she was seized wsth severe pain in the right ham, soon followed by swelling and tenderness of the right leg below the knee; rendering her unable to put her foot to the ground.

The lungs, on examination, seemed quite healthy; devoid even of those equivocal signs which it is the fashion to dignify into a 'pre-tubercular state.' The heart was weak, with a soft systolic and aortic bellows sound, which, though of great intensity, suggested no valvular lesion. Her emaciated (or rather flaccid and almost prematurely wrinkled) condition was associated with a color better described as a fallow-white, than as the white or greenish hue of ordinary chlorosis. Her pulse and breathing were about 100, and 24, in the minute respectively.

We will not attempt to 'beat the bounds' of chlorosis and leucocythæmia, or to launch into controversial pathology. Nor need I dwell on the details which seem to exclude the heart and the lungs respectively from all but a secondary rank in the patient's malady. Perhaps, however, I may say the mere intensity of a bellows-sound is (unless extreme) a bad guarantee for its valvular origin; which, again, is better suggested by a long (as during systole, diastole, and pause) and unvarying (as during sleep and excitement) character of the murmur. Further, the great increase in the pulmonic exhalation of carbonic acid in the chlorotic state implies, I think, an activity of the lungs; such as causes a noisy, and sometimes even irregular, style of respiration, in itself decidedly suspicious or equivocal, as resembling (until you sum up all the regions of such a chest) the local irregularities and compensations of tubercular deposit obstructing certain parts of the lungs only.

Keeping, then, to the plain, common-sense points of the case, it suggested two chief diagnostic inferences: chlorosis affecting the system; and a painful, œdematus state of the right leg. On examination, the popliteal vein of this leg was found to be hard, swollen, and surrounded by an exquisitely tender infiltration of a semi-solid character. The chief pain and tenderness, localized here, radiated with decreasing intensity down the limb, in pretty close correspondence with the course of the sural vessels and nerves. The whole aspect of the leg reminded one of *phlegmasia alba dolens:* save that, in addition to its very different localization, the swelling was less smooth, white, and dense—in other words, more akin to ordinary œdema —than that of this malady.

Here, then, was a concurrence of chlorosis and popliteal obstruction—we will not say *phlebitis,* for if we must have a single Greek word, *Phlebobyst* (*venœ obturatio*) would be more accurate, and less presuming. And the question I would now notice and answer is, "Must this concurrence be regarded as a mere coincidence; or are the two states, the general and local, linked together?"

The latter is the alternative I am anxious to enforce. Without being aware whether I am the first to do so, I wish to call your particular attention to a point of great practical importance in the pathology of chlorosis: to the risk of a coagulation in some of the larger veins, of part of that fibrin, long known to be present in excess in the blood of chlorotic patients.

As productive of a kind of *phlegmasia dolens*, quite distinct in its signs and symptoms, (and, unhappily, in its intractibility) from the dropsy of this malady, and I think oftenest affecting this very vein (the popliteal), it has been for some known to me. And a case or two of fatal gangrene, and of inflammation of the lung—as well as several of pleurisy, and of sudden and alarming dyspnœa, happily recovered from so as to permit no further verification of their local causes—have suggested to me the occurence of similar clots and obstructions in the pulmonary veins as constituting less frequent, but more dangerous, incidents of the same kind in chlorotic subjects. And while our fever cases in this hospital have shown me a decided preponderance of females in the *phlegmasia dolens* which occurs consecutively to this malady, I am inclined to attribute much of that more marked preponderance of female cases noticed by some writers (Mackenzie) to this chlorotic, as well as to the puerperal, variety of the lesion.

Few better illustrations occur to me of the way in which, however unconsciously, working pathologists help each other, than in the confirmation these views of mine have lately received from an excellent Essay, for which I am indebted to Mr. Humphrey, of Cambridge. This distinguished anatomist and surgeon reports from his own practice several valuable cases, which, while they go far to sustain the important deductions he bases upon them, I can only now notice as abundantly confirming my own independent views, and in some respects with better evidence than I have to offer. On the frequency of the popliteal affection, indeed, he quite anticipates and extends my statement, which only refers to *chlorotic* obstructions of this vein. And though the specific danger of chlorosis which my observations indicate is not dwelt on by him, yet it is interesting to notice that several of his cases refer to young females affected with anæmia, or deficient menstruation. Lastly, as respects the pulmonary obstruction, his exact and numerous observations far surpass my own scanty or vague facts, and reduce these latter to a value chiefly bearing on the specific propositions suggested by the case before us.

That chlorosis has an element of danger, till now, I think, unnoticed—the risk of venous obstruction by the coagulation of fibrin of the blood. That this obstruction oftener affecting the popliteal veins, sometimes engages the pulmonary arteries, the venous blood of which becomes the seat of coagulation similar to that in the preceding systemic vessels. That sudden and extreme dyspnœa, gangrene, pneumonia, or even pleurisy, occurring in chlorosis, justify a suspicion of some such accident in the pulmonary vessels. That, when localized in a limb, the analogous occurrence can generally be recognized with an ease approaching to certainty.

As to treatment, the pulmonary cases suggest (and in my own practice have amply repaid) a treatment chiefly by stimulants, a generous regimen and extreme quiet. The popliteal are, as already hinted, rather intractable. The general treatment of chlorosis, especially by ferruginous tonics and cod-liver oil, is of course all important. As to local remedies, those I have found most useful are: the raising and extension of the leg, as well as its support by careful bandaging; and, in severe cases, acupuncture of the distended areolar tissue some distance below the obstructed vein. The latter remedy seems to be both harmless and efficacious, especially if the limb be allowed slowly to drain off its contents, in a dependant posture, into a flannel bandage kept warm by frequent wringing out of hot water. This procedure is advantageously followed, when the punctures have healed, by gentle friction of the surface with warm oil, once or twice daily; care being of course taken to use no more pressure than the tenderness of the parts will bear without causing pain. Lastly comes a local remedy which, in some of the œdematous swellings of mere debility, I have found of great advantage, and of considerable (though less) use in *phlegmasia dolens* generally—viz., steeping the leg in tolerably hot and strong brine (made by adding to each double handful of salt a gallon of hot water) for an hour at a time nightly. In the case before us, I have not thought acupuncture necessary. The patient has regained a good deal of strength and even of color. Her pulse and breathing have fallen in frequency to about 80 and 20 per minute. Her cough has disappeared. The leg, too, has greatly diminished in size; it has become much less tender and painful in its popliteal region, and it allows her to take a fair amount of walking exercise without any pain or limping difficulty. In short, she is far advanced towards recovery.—*London Lancet.*

Trichiasis.—M. Anagnostakis, of Athens, proposes a very remarkable procedure for the treatment of this troublesome affection. It is to curl the eyelashes upwards. He uses for this purpose a pair of miniature curling tongs gently heated, and covers the globe of the eye with damp paper. This "innocent manœuvre" he directs to be repeated from time to time, until the lashes take their normal direction; M. Anagnostakis describes the proceeding as one "delicate in execution, but having the advantage of not terrifying patients, so that one may apply it to the most cowardly and the most coquettish."—*Ibid.*

Digital Compression successfully employed in a Case of White Swelling.—The success of digital compression of the principal artery in limbs attacked with inflammation has suggested to Dr. Giachich the idea of adopting this plan in order to allay some very acute pains produced spontaneously in the knee affected with white swelling. At the end of a quarter of an hour, during which the femoral artery was compressed, the patient ceased to suffer. This rapid improvement induced the physician to continue the experiment, and for twenty days this plan was adopted night and morning, the result being that the patient became enabled to move the joint which had up to that time been entirely motionless.—*Medico-Chirurgical Review.*

Treatment of Nervous Headache by Hydrochlorate of Ammonia.—Hydrochlorate of ammonia has been lately recommended by some English physicians in certain cases of headache and obstinate neuralgia, and Dr. Barrallier, physician of the navy at Toulon, has made some observations confirming the beneficial effects of this salt in some of the painful affections of the head. He met with varying success, however, some of the cases seeming not to be amenable to treatment. The conclusions he has drawn are:—1. That the mixture containing hydrochlorate of ammonia almost constantly dissipates the fits of idiopathic headache, and of that which is consecutive to an unusually abundant menstruation. 2. That it is powerless in relieving fits of hemicrania dependent on irregularity or suppression of menstruation. 3. That its use has been attended with pretty good results in cases of cranial pain dependent on functional derangement of the stomach, and also in accidental nervous headache. 4. That it has relieved headaches consecutive upon reiterated attacks of intermittent fever, such as are observed at the decline of severe fevers, and in the course of the period of irritation of typhus. 5. That its action is not remarkable, except when it is given at the period when the pain is most intense.—*Medico-Chirurgical Review*, from *Bulletin General de Therapeutique*, March 30, 1859.

Medullary disease Springing from the Deltoid.—It would seem that the muscular structures, when their integrity to some extent is destroyed, are not uncommonly the source of tumors which take on malignant action. It is very probable, however, that in the majority of instances the system is already contaminated by the morbid element, and deposits itself on the first occasion of lesion of structure. A case that may be pronounced an example of this kind was submitted to operative measures by Mr. Hilton, at Guy's Hospital, on the 7th. A strong-built, stout, and apparently healthy man, aged forty-one, was admitted on the first of February, with a prominent, round, firmly adherent tumor, of the size of a shaddock, projecting outwardly from the upper part of the left deltoid muscle; the skin was red, covered with a number of minute vessels, and several veins ran from it towards the chest and neck. It first appeared nine months ago, commenced to grow, and then to increase pretty rapidly. This is the old story with most malignant tumours. It was attributed to a severe blow on this site two years before, which may have ruptured some of the fibres of the muscle; and these in their subsequent union may have laid the foundation for the tumor. It was not movable, but seemed to be rather firmly attached to the arm. Its sensation was semi-fluctuating, but no fluid escaped on the introduction of a trocar and canula. Under the influence of chloroform, an elliptical incision was made, and the growth carefully dissected away, with some superficial portions of the deltoid muscle, from which it evidently sprung. On section, it showed the true elements of medullary sarcoma. The wound is healing up by suppuration; but there is an untoward feature in the case—namely, that the patient has been wasting away for the last few months without any apparent cause; this points to the possibility of the existence of the same disease in some other part of the system. —*London Lancet.*

Lemon-juice in Rheumatism.—This remedy has lately been extensively employed, and with considerable success, by the celebrated pathologist, Lebert, formerly professor at Zurich. In the Clinical Report just published, lemon-juice is stated to have been given with excellent results, especially in cases where several joints were affected. Patients improved towards the third and fourth day; they were much relieved on the sixth day; and, save a few cases where relapses took place, convalescence was fully established towards the tenth or twelfth day. M. Lebert thinks lemon-juice, the use of which was introduced by English and American physicians, of great efficacy in rheumatism: he begins with four ounces a day and gradually rises to eight, given by teaspoonfuls. Citric acid was also tried, but did not answer so well, and did not agree with the patients.—*London Lancet* from *Arch. Path. Anat.*

The Importance of the Functions of the Skin, in the Pathology and treatment of Tubercular Consumption. By A. Toulmin, Esq., (St. Leonard's).—The author commenced by offering, as the proximate cause of tubercle in all cases, the breathing of impure air, and air in so small a quantity as to render it impure, especially during the night. Wherever this was the continuous state of existence, the result must be a deficiency of oxygen in the red corpuscles of blood, and as the consequence of this, the deposition of plastic fibrine in an incomplete state of oxygenation, and therefore of organization, and thus incapable of being ultimately got rid of by change of matter. It consequently remained as an extraneous adventitious substance in the system, offering to the observer all the characterics of tubercle.

To explain the discrepancy which appears in the rich (who have no want of oxygen in the air they breathe), being equally subject to phthisis with the poor, he drew attention to the importance of the respiratory functions of the skin, as proved by the almost instant death that occurs on closing the cutaneous pores by artificial means, as by varnishing and gilding the skin of rabbits and other animals; and he observed that, in consequence of the coldness of our climate, and other causes, the better classes of society were certainly not in the habit of making the washing the whole surface of the body a part of their daily toilet; and consequently, that the exuviæ momentarily forming on the surface of the skin—the joint production of the sordes from within, combined with the *debris* of the cuticle—soon became more or less impervious, although the individual might be in the habit of changing his linen daily.

As an illustration of this state of the skin, the author referred to acne so frequently seen on the face, as being in reality the general state of the skin of a large proportion of society, especially in the earlier periods of life, when phthsis generally shows itself. The free entrance of air, as well as the exit of carbonic acid through the skin, being impeded, the same imperfect oxygenation of the blood ensued, as was produced in the poorer classes, by breathing mephitic air. For the removal of this state of the skin, the only means of cure were to be found in the instituting a full and free diaphoresis by the aid of artificial heat; the result of which in first softening and then expelling large quantities of inspissated sebaceous matter, after the surface of the body had been washed clean with soap and water, was most surprising.

The us of the hot air bath, as a therapeutic agent, was no innovation on the established practice of the profession, as it was the mode of bathing practiced by Hippocrates, Galen, and Celsus; and the universality of the practice was shown by the fact that the remains of such baths had been found in every colony of the Roman empire.

If turbercle be imperfectly organized fibrine, then it should be looked upon as a blood disease; and, seeing it is found in other parts besides the lungs, without destroying life, its deposition in them should not be considered as disease either of the lungs or air-tubes, but as an accidental circumstance, killing mechanically, by its ulceration extending to the surrounding lung-tissue. The author called in question the propriety of sending consumptive patients abroad to a warm climate during any stage of the disease; as although in the latter stages of the complaint, when the air-tubes sympathized with the tubercular irritation, a warm atmosphere seemed more congenial to the patient's feelings; still, in the earlier stages, when a cure was practicable, the breathing the open air of our winter (at least, on the south side of the island) was most important. He instanced, as proof, that the breathing cold air did not cause the complaint, the fact that tubercular consumption is not to be met with in high northern latitudes.

The treatment of phthisis was considered under its hygienic and medical aspects. Under the former, and particularly in the earlier stages, the patient was recommended to live in a high, dry, and marine atmosphere, on the Downs, rather than under them; to be as much as possible in the open air; to use all sorts of athletic exercises (avoiding such as accelerate the pulmonic circulation) suitable to the strength and sex of the patients, by which a more rapid change of matter is effected, together with absorption of already deposited turbercle; as well as the deposition of more healthy—i. e. of more highly organized matter. Medically, the treatment was comprised in a few short aphorisms: which were, 1. The keeping the functions of the skin in healthy action by means of the hot air bath. 2. The annointing the whole surface of the skin daily with some oleaginous matter. 3. The keeping a local ulceration always patent by means of an issue or seaton; and 4th. The use of some one or more of a large variety of tonics and antiseptic medicines; all admirable adjuvants in improving the general health (if selected in conformity with the function most sympathizing with and reacting on the disease), but powerless in arresting the specific lesion in question, with the previous "Open Sesame," of the hot air bath, followed by aspersion of cold or tepid water.—*N. Y. Medical Press* from *Brit. Med. Journal.*

With some physicians strychnine has become a favorite remedy in the treatment of spermatorrhœa. The dose is minute, not exceeding the thirtieth of a grain given twice a day.

The following case was communicated to the *Boston Medical and Surgical Journal*, by Dr. Charles D. Cleveland, of Grass Valley, California:

Spontaneous Amputatton of the Arm.—In the middle of April, 1859, a Digger Indian got into a drunken fracas with his fellows at a *fandango*, in Penn Valley, eight miles west of this place, in the course of which he was shot through the arm, midway between the elbow and shoulder joint, the ball severing the brachial artery. He was taken to his miserable abode among the brush, and there attended by his faithful squaw. The arm at last mortified, to within three inches of the head of the humerus, and after a while became dry and withered. At the point of connection between the lifeless and vital portions of the member there was a copious secretion of pus. At last, an old Indian came along, and, seeing his condition, prevailed upon him to permit the dead mass to be cut off. So, procuring a dull handsaw from a neighboring ranch, he severed the humerus, leaving it protruding three inches beyond the soft parts.

The patient was soon upon his feet, and walking about this town, apparently proud of his revulsive pretext for begging. Here I had frequent opportunities of observing his condition. Healthy pus was freely discharged from around the bone, the medullary cavity of which, with superstitious care, was kept plugged with cotton wool.

About the first of March, the dead bone was thrown off, including about one inch and a half of the portion within the soft parts. The sore at this time is entirely healed, and the stump is as comely as possible.

Irritable Bladder.—We notice in our exchanges, foreign and domestic, the relation of several cases of irritability of the bladder treated successfully with belladonna. It seems that in most of the cases the belladonna had to be used to the production of its pathogenetic effects, before the cure could be established.

Cataract in Diabetes.—It would appear from an article by M. Graefe, in the *Deutsche Klinik*, that this surgeon thinks diabetes very frequently the cause of cataract. He examined very carefully, during a journey, a great number of diabetic patients under treatment at different hospitals, and noticed that about 1-4 of these patients were affected with cataract. This proportion, Mr. Graefe states, has also been noticed by a great many physicians who have had diabetic patients under their care. It has likewise been observed that both young and old subjects, laboring under diabetes, suffer from cataract, so that the supposition of mere coincidence cannot be entertained. With the young, the soft cataract has been mostly noticed. M. Graefe extracted three times by the liner incision, with favorable results.—*London Lancet.*

Quinine as a Specific in Scarlet Fever.—Dr. M. B. Sellers, of Oakland, Louisiana, states in a private letter which has been handed to us, that after considerable experience, he believes quinine to be a specific in the treatment of scarlet fever. He has treated fifty cases, some of which were malignant, with quinine, without one resulting fatally, and previous to his adopting this treatment he had several deaths in his practice.

He administers it in full doses, giving to children seven years old five grains every hour until twenty grains are taken. To adults, ten grains every hour until they take forty grains. He does not say whether this dosing is repeated. The quinine treatment was almost exclusively relied on.—*Med. and Surg. Reporter.*

Phosphorus as an Aphrodisiac.—It is said by the Abbe Moignot that if pregnant women breathe an atmosphere loaded with phosphoric emanations they are sure to abort; and that men breathing the same atmosphere have, after awhile, vehement excitation of the sexual appetite. It has long been known that the phosphate of gold will, when given to ducks, so excite the sexual desire in them that they will continue to copulate until completely exhausted, or dead.

On the Use of Sulphate of Copper and Opium in the Treatment of Diarrhœa occasioned by Dentition. By Dr. Eisenmann, of Wurzburg. (Bulletin General de Therapeutique, June 30th, 1859.)—At the period of their first dentition, children are often attacked with diarrhœa, not generally of a severe character, but sometimes, and especially when the dentition coincides with weaning, the vacuations are copious, and the diarrhœa passes into the chronic form. An extraordinary emaciation then ensues, and sometimes nervous symptoms of various kinds supervene, especially the *hydrocephaloid* disease, which has been mistaken for acute hydrocephalus. When it has passed into the chronic stage, this diarrhœa is very frequently fatal, the patients dying of marasmus. For this affection Dr. Eisenmann has successfully employed a combination of sulphate of copper with opium. He prescribed it first in the case of a child whom he attended in the year 1838. The diarrhœa had not at first excited much attention, but the evacuations soon became serous, lasted three months, and reduced the child to a mere skeleton. She was in a continual state of *coma vigil*, the pulse was very frequent and scarcely to be felt, the appetite was lost, and the thirst was inextinguishable. The sulphate of copper and opium, both in very small doses, were prescribed in powders to be taken three times a day. In the first four days of the treatment there was already a perceptible amendment, the evacuations became less frequent and less serous, and three days after the patient began to be convalescent. The diarrhœa ceased, the appetite returned, and the digestion was re-established, the strength and the normal size of the body re-appeared, and four weeks afterwards the cure was complete. Dr. Eisenmann was afterwards called upon to treat other cases of the same kind, and by employing the same remedies, similar favorable results were obtained. In the year 1840, he had occasion to observe a fourth case of this kind of diarrhœa. The patient presented the same symptoms as those above described, with this difference, that there was vomiting in addition, and that the disease had lasted only a fortnight. The emaciation was, however, already very considerable: the abdomen was somewhat tumefied and painful on pressure. The appetite was bad and the thirst urgent; the respiration was accelerated, and there were mucous rhonchi, without any symptom of pulmonary lesion, the face was pale and a little puffy, and the looks expressed apathy. Sulphate of copper and opium, in very small doses, were prescribed, and twelve doses brought about convalesence in four days.—*Medico-Chirurgical Review*, January, 1860.

Double Extra-Uterine Gestation.—M. Rupin relates, in the *Gazette des Hopitaux*, the case of a healthy woman of thirty, who had borne two children, parturition having in both cases been perfectly normal. Towards the sixth month of a third gestation, she experienced severe pains, and a tumor was discovered projecting into the vagina. Fluid and the head of a child were distinctly felt, and as the pressure was such as to interfere altogether with the functions of the bladder and rectum, an incision was made into the walls of the vagina, and a fœtus extracted. The mother soon sank under terrific hæmorrhage.

On a post-mortem examination, the cyst, which had contained the fœtus, was found behind the abdominal walls, and before the uterus, with which organ it had no direct communication. At the fundus of the cyst lay the placenta, rather larger but less thick than usual. During the efforts made to remove it, spiculæ were felt, and finally all the bones of another fœtus were taken from the placental mass, in which they were embedded. They seemed to belong to a fœtus of four months, whilst the one which had been extracted from the cyst appeared six months old. On opening the uterus, the lining membrane was found villous, and the size of the organ rather above the normal standard. The ovary on the right side was of the ordinary size; a corpus luteum was noticed in it; and the whole of the uterine appendages on that side were perfectly healthy. The left ovary, however, was atrophied; the Fallopian tube could not be distinguished, and it appeared as if the cyst had become developed in it and on the broad ligament.—*London Lancet.*

Unsuspected Abscess of the Prostate.—Mr. Thompson mentions in his work "On the Enlarged Prostate," that acute inflammation of that organ is by no means a common affection, if regarded as distinct from and unassociated with inflammation of the urethra or bladder. It is usually observed in connection with either of the latter, and most probably proceeding from the one or the other. There can be no doubt that the symptoms of the prostatic inflammation may be altogether masked by the state of the urethral mucous membrane, or even of the bladder, itself. This fact was recently illustrated by the case of a patient who was admitted into Guy's Hospital on the 19th ultimo, in the medical wards, for retention of urine, not supposed at the time to depend upon any other cause than defect in the contracting power of the bladder. He was examined some days afterwards by Mr. Bryant, who discovered that the patient, a man aged forty-three, was the subject of stricture of the uretha, arising from a strain or injury to the perinæum by being thrown across an iron bar some time previously; and an examination by the rectum detected an enormous prostatic abcess filling up the whole pelvis; it ruptured into the uretha whilst being examined, and a large quantity of pus passed in that way. The retention was, at the same time, relieved; but it seems uncertain whether it may have arisen primarily from the stricture or the asbcess. The belief of Mr. Bryant was that the abcess had arisen since the patient's stay in the Hospital. No painful nor urgent symptom to indicate inflammation of an acute character was present before admission, and the patient declared he was always in the enjoyment of good health before the present inability to pass urine. He is now improving rapidly, but it is most probable that the prostatic abscess is the result of the urethral stricture coexisting with some amount of chronic disease of the prostate gland, arising from the same cause as produced the stricture.

If therewas an unsuspected abscess in the case just referred to, there is no doubt that in the present instance it occurred spontaneously whilst the patient was in the hospital. He was a man, aged thirty, who was admitted on the 14th December, with a stricture of the uretha of thirteen years standing, for which he was undergoing treatment. Some of the symptoms of acute prostatitis set in which were succeeded by retention of urine, and a prominence in the perinæum. The nature of these being suspected, Mr. Bryant opened the abcess in the perinæum, and let out a quantity of healthy pus from the prostate, to the great relief of the patient. When we last examined him, we found the stricture nearly well but the perineal wound was still unclosed, and through it the urine occasionally escaped during the act of micturition. When left to itself a prostatic abscess spontaneously evacuates into the urethra, as that in the first-mentioned case was on the eve of doing, when the mere examination by the rectum caused it to give way at its weakest point, which was the urethra. The mere introduction of a catheter frequently effects the same thing, and, as stated in Mr. Henry Thompson's elaborate work on the diseases of this gland, the matter is sometimes evacuated by the rectum. This result Mr. Thompson considers to be perhaps as favorable, generally speaking, as when the abscess bursts through the urethra. There is the risk, however, of the formation of a urethro-rectal fistula; but this is a result not usually witnessed.

As soon as the abscess can be detected, experience ha shown that the wisest course is to puncture it in the perinæum as early as possible, and this, in fact, is the almost invariable rule with the surgeons in our metropolitan hospitals.—*London Lancet.*

Chronic Ulcer.—Dr. Brainard, of Chicago, advises (*Chicago Medical Journal*) the use of the vapor of iodine applied to the surface of chronic ulcers. The effect is said to be good.

Treatment of the Freckles of Pregnancy.—When freckles, which are of such common occurrence in pregnancy, persist after delivery, M. Hardy recommends the following lotion: Dist. water, 125 parts; corrosive sublimate, ½ part, sp. wine, 9 parts, to dissolve it, sulph. zinc, acetate of lead, aa 2 parts. When this application fails, Bareges or Luchon water, applied as local douches to the parts affected, induce slight inflammation, which facilitates the absorption of the pigmentary deposites.—*Med. Times and Gazette*, from *Bull. de Therap.* April, p. 362.

To Preserve Pills Soft.—A small portion of quite pure glycerine, added to a pill mass, prevents it from hardening. If the mass contain resins, a little alcohol must be added to the glycerine to prevent disaggregation.—*Med. Times and Gazette*, from *Moniteur des Hop.*, No. 53.

TICKNOR & FIELDS, the well known publishers, of Boston, have in press, and will issue in the course of a few days, a work on the "*Medical uses of Electricity in the Treatment of Nervous Affections.*" This work is from the pen of Alfred C. Garratt, M. D., of Boston, who has, for a number of years, made the investigation and treatment of nervoue disorders a speciality. The work will contain over seven hundred pages, and illustrated by nearly one hundred cuts, showing not only the most improved methods for the therapeutical employment of Electricity in nervous affections, but also showing the anatomy of the parts liable to be involved; moreover presenting a concise view and means of diagnosis of the great variety of nervous affections met with in every day practice. There is no similar work in the English language, and the work of Dr. Garratt will supply a want at present felt by the professton.

Editorial Department.

We understand that the City Council, at a recent meeting, elected Dr. WILLIAM H. DONNE to the post of Superintendent of the *Louisville Marine Hospital.* The choice of the Council, for once, at least, will not fail to meet the hearty approval of every professional man in the city. Dr. Donne, to skill and judgment and experience, both as physician and surgeon, joins an acquaintance with hospitals, abroad as well as at home. We trust that the city fathers will re-elect him from time to time, as long as he signifies a wish to be re-elected.

THE CHEMIST AND DRUGGIST; A MONTHLY TRADE CIRCULAR.—This is the title of a journal, coming to us in exchange, from London; it is devoted to the special interests of the trade. "Our end and aim," it says, "is to become a medium between *all* who are interested in the production and distribution of the articles which are dealt in by chemists and druggists." The Chemist and Druggist is this, and a great deal besides. Here, for example, in the number before us, is an instalment of *The History of Chemistry;* here is the first of a series of papers on *Quantitative Chemical Analysis*, by Dr. Henry M. Noad, a name familliar to the reader; here are articles on *Veterinary Medicine*, by M. Lupton, M. R. V. C. S., London and Edinburg; and here is the first of a series of papers, written in a very agreeble manner, on "*The Science of Familiar Things*." In looking over the advertisements we have been surprised and edified by the numerous illustrations of articles, supplying human wants, artificial and otherwise. The American agent for the Chemist and Druggist is C. F. Heinrichs, 150, Broadway, New York.

Dr. J. H. Wheeler, of Sligo, Ky., writes us that he has met with very good success in the treatment of *diphtheria*, as seen in the region where he resides. He says:

> I should give the following treatment the preference in diphtheria: Begin with an emetic of ipecac; purge with calomel and rhubarb; use the tincture chl. iron, in doses of from five to ten drops, with chlor. potash from five to ten grains; give brandy, quinine, and carb. ammonia; as a local application, sol. nit. silver, from five to sixty grains to the ounce of water, (varying the strength to suit the age of the patient); and have a good supply of fresh air in the chamber, or the cabin, as the case may be.

TO CORRESPONDENTS.—"Rusticus" is very good, indeed; he may come in play by and by. We shall keep an eye in the direction indicated.

Some of our correspondents have inquired of us concerning drugs, and drug stores, in the city. Of houses for the sale of drugs we have no lack, and each, we believe, is in good repute. That of WILSON, PETER, & Co., is one of the oldest in the city, perhaps the very oldest, and is also one of the soundest; it may be relied upon in every way. Messrs. Wilson, Peter & Co., are agents for the articles manufactured at the Louisville Chemical works, articles which have given some new features to the trade in this region. They are likewise agents for Tiemann's surgical instruments. Almost anything, indeed, pertaining to medicine and surgery, can be procured at or through this house.

The house of THOMAS E. JENKINS & Co., besides dealing in drugs, deals also in chemical, philosophical, and pharmaceutical apparatus, etc.; it is eminently worthy of trust and confidence. The principal of the house is an accomplished chemist and pharmaceutist.

We see that Scoutteten, of Metz, advocates friction of the body with olive oil for the purpose of preventing the unfortunate sequelæ of scarlatina. This is substantially the bacon rind treatment of some of our valued townsmen

LOUISVILLE

Medical Journal.

JUNE, 1860.

ORIGINAL COMMUNICATIONS.

ART. I.—*A Case of Abscess in the Walls of the Bladder*, reported by S. BRANDEIS, M. D., of Louisville, Ky.—*with Remarks*: by M. GOLDSMITH, M. D., Professor of Surgery in the Kentucky School of Medicine.

Mr. ——. æt. about sixty, born in Austria, arrived in this city on the 9th of June, 1859. He came from Europe *via* New Orleans, and without stopping on the way. He stated that he enjoyed the most perfect health, with an appetite almost voracious during the voyage to New Orleans. He came from that city to this by steamboat as a steerage passenger, and while ascending the river he fell sick, but of what disease he could not inform me. He could only tell me in regard to his illness that during its continuance he had much thirst, drank large quantities of river water, and, for thirty-six hours next preceding his arrival here, suffered from retention of urine and constipation of the bowels.

I saw the patient at 4 P. M. on the day of his arrival, and found him in the following condition: Body emaciated; skin warm and of a yellowish tint; perspiration profuse; face expressing great anxiety; respiration quick and short; pulse 120, and feeble; tongue heavily coated and dry; abdomen distended, especially in the hypogastrium; percussion in that region dull and in the neighborhood tympanitic; bladder evidently distended; the lower extremities cold, mottled, and œdematous: The cutaneous veins were flattened and visible through the skin.

A catheter was introduced, and through it a gallon and a half of red, brown, muddy, stinking urine was discharged. The evacuation of the bladder occupied about ten minutes. The contraction of this viscus was so insufficient that its contents could not be discharged without the assistance of my hand, pressed upon the hypogastrium. The relief of the pain and other distressing symptoms of retention was complete. An active dose of calomel and comp. ext. colocynth, to be followed by an effervescing draught, was ordered.

June 20th. The patient passed a quiet night. He slept soundly for several hours. The bowels were moved, and at the same time some urine was passed. Skin cool and moist; œdema of the lower extremities somewhat less; appetite returning; but the bladder is again distended.

The catheter was again introduced and about a gallon of urine, not so offensive in odor as the first, drawn off. I directed one-twentieth of a grain of strychnine to be taken twice a day, an ointment of belladonna to be applied to the perineum, and small pieces of ice to be swallowed at intervals in place of copious draughts of water.

This treatment was continued for about two weeks. The catheter was introduced twice a day. I tried to leave the instrument in the bladder so as to allow the urine to escape continuously, but the patient would withdraw it. During the interval mentioned the patient spent the days out of bed, took his meals with evident relish, and appeared cheerful.

Towards the end of the third week some pain in the perineum, and ischuria came on. The introduction of the catheter became difficult. I succeeded in the introduction of the instrument at the second effort. A coagulum of blood was withdrawn with the catheter, and some bleeding followed. I was unable to determine the cause of the difficulty of the operation. Opiates were administered by the mouth and rectum. Emollient drinks, and warm fomentations to the perineum, were ordered.

At the end of two days the retention of urine subsided, to be replaced, however, by incontinence. The patient had to pass his urine at very short intervals, discharging but a spoonful at a time. The urine was red-brown, muddy, and exceedingly offensive in its odor, and, on examination with the microscope, presented blood and pus corpuscles in great abundance.

The patient now complained of pain, extending from the lumbar vertebrae to the false ribs of the left side. He soon after became delirious. He replied to questions vaguely, and lay the most of his time in a state of semi-stupor. He vomited frequently; the vomited matters had a urinous and ammoniacal odor. The perspiration was offensive. The breath was loaded with ammonia. (This was tested by holding a rod moistened with muriatic acid before the mouth.) The pulse was rapid and feeble.

Prof. Goldsmith was called to the case with me. From the consideration of the symptoms mentioned above, we came to the conclusion that there must be acute nephritis, and inflammation of the bladder. The patient died on the 27th of July, at 11 o'clock, P. M.

Post-mortem appearances, nine hours after death. We opened the abdomen only. Peritoneum a little injected; no adhesions; no unusual amount of serum.

The kidneys were both enlarged, the right to about twice its natural size, and the left to about once and a half its natural size; from each the capsule was easily stripped. The left kidney contained several serous cysts, the right two. Both organs were of a mottled mahogany color, very succulent, and somewhat softened in texture. In the right numerous scattered yellowish elevations were noticed, and a few in the left. These papillary prominences were found to contain pus globules and other inflammatory products. In a section of the kidney, yellowish lines could be traced along the tubules to all of the papillary prominences. Several little, rounded abscesses were found at different points in the tubular structure of each organ. The tubuli renales were enlarged and their lining membrane yellowish and thickened. The ureters were not much affected; they contained some pus and blood globules.

The bladder, somewhat contracted, contained about six ounces of urine. The muscular coat was very much thickened. The mucous coat was thickened also, but not softened—its surface, of a dirty gray color, was rugose, and covered with a croupous, tough, and adherent exudation, like that so frequently seen in acute dysentery.

On the side near the opening of the right ureter an aperture, large enough to admit the finger, was found, leading to an abscess in the walls of that side of the bladder. This opening was smooth-edged, bevelled, and nearly regular. The abscess was about the size of an orange; its boundaries were well defined; its interior lined with a condensed cicatricial tissue. There were no ragged flocculi attached to the parietes or floating in the interior. The peritoneum over the abscess was thickened but not adherent. The prostate was uniformly enlarged; no prominence of the third lobe.

This case presents several points of interest, apart from its rarity and the uncommon dimensions of the abscess. The reader will observe that the patient made no complaint of pain in the region of the bladder, other than that properly referable to the distention of the organ; that there was no tenderness even on the right side of the hypochondrium; that the abscess was lined with smooth, dense cicatricial tissue; that the opening into the abscess was smooth, firm, and bevelled; and that there were no evidences of acute or recent peritonitis on the surface of the parts containing the abscess. These facts all go to show incontestibly the chronicity of the abscess. An inquiry into the natural history of collections of pus in the walls of the bladder may throw some light upon the date of the abscess in this case, as well as upon the probable method of its causation.

Erichsen (Am. Ed., p. 784,) says that in examinations of the bladders of those dead of chronic inflammation of the bladder, "abscesses may be found in the walls, or outside of them, circumscribed and bounded by plastic matter;" and this is all that he says on the subject.

Sir Benjamin Brodie, in his *Lectures on Diseases of the Urinary Organs*, disposes of the whole subject in the following passage:

> In cases where the disease is still farther advanced, before the patient dies, we find that the inflammation has extended to the muscular tunic of the bladder, and to the loose cellular membrane by which the bladder is surrounded. Then coagulated albumen is deposited in the cellular texture; not unfrequently small putrid abscesses are formed in it; * * *

Crosse, in his prize essay on the *Urinary Calculus*, relates a case of large circumscribed abscess in the walls of the bladder and its fundus. In plate 17 is figured a bladder with three distinct circumscribed abscesses in its walls, from two of which abscesses the pus was discharged by a circuitous route and by a small opening into the bladder, and the other, unopened, was ready to burst into the cavity of the colon.

Desault, in his volume on the *Diseases of the Urinary Passages*, makes mention of infiltration of urine into the cellular tissue of the bladder and pelvis in the following passage:

> Sometimes a crevice is made in the bladder, through which the urine is effused and insinuated into the cellular texture of the pelvis; diffusing itself under the peritoneum, even to the region of the kidneys, forming tumours in the perineum, and reaching the scrotum, the common integuments of the penis, and the superior part of the thighs. We have even seen the urine insinuate itself sometimes into the thickness of the parietes of the abdomen, and upon the sides of the thorax, and produce abscesses

> which are generaly succeeded by the gangrene of the parts where they are formed, and by fistulæ. To these symptoms are also commonly added those of the resorption of the urine and its suppression.

And in the preceding paragraph this sentence occurs:

> Irritated incessantly by the presence of the urine, which is made more acrid and corrosive by stagnating, it inflames and falls into a kind of putrid and gangrenous suppuration.

He also speaks of retention of urine from an "acrid humor seated in (the coats of) the bladder." He says: "It has been supposed that the bladder, irritated by the acrimony of the humours, which are deposited in the thickness of its coats," etc., etc. "This kind of retention of urine is very frequent; we have often observed it in persons affected with rheumatism and gout; it is also a very usual effect of herpetic, psoric, venereal disease, etc., deposited upon the bladder." And he quaintly adds, in reference to the treatment necessary to the displacement of the acrid humors repelled from the surface of the skin to the coats of the bladder: "If this humour was a contagious humor repelled, such as the psoric, it has even been advised to contract this disease afresh, either by sleeping with itchy persons, or by wearing their shirt or some of their garments."

This is about the amount of what I can find written in the common systematic treatises. In the medical journals at my command, cases are occasionally reported, but they are rare. The matter of suppuration about the bladder may then be stated as follows :

Inflammation leading to abscess of the cellular tissue surrounding the bladder (pericystitis) may be excited by various causes. Pericystitis may be idiopathic, i. e. without any obvious local exciting cause. In such cases the cellulitis seems to arise out of those general conditions which obtain in erysipelas, pyæmia, and the like, and therefore must be regarded as the local expression of a general disorder.

But we have besides these a spontaneous inflammation of the cellular tissue surrounding the bladder, which is designated as *pericystitis.* Like the inflammatory, suppurative, and gangrenous processes of the subcutaneous cellular tissue, or of the cellular tissue surrounding the cœcum or rectum, it may be idiopathic, though it is more frequently a secondary process; it is to be considered as a localization of pyæmia, which was either spontaneous or dependent upon an absorption of pus, or of a degenerate typhous or anomalous exanthematic process. It spreads with facility through the cellular tissue of the pelvis, to the cellular septum of the rectum, to the anus, and into the scrotum; it attacks the submucous tissue of the bladder, and having passed into suppuration and necrosis causes an exfoliation of the mucous membrane and perforation of the vesical parietes.—*Rokitansky's Pathological Anatomy*, Vol. 2, p. 175.

2d. Pericystitis may be caused by the infiltration of urine after ulceration or gangrene of the mucous and muscular coats of the bladder.

Finally the muscular coat is involved in the suppurative and gangrenous destruction, and general peritonitis ensues; or even before this takes place sinuses are formed between the vesical membranes, the parietes of the bladder are eaten through, and present a cribriform appearance, and the urine exudes into the surrounding cellular tissue and into the peritoneal cavity. The bladder is converted into a paralyzed sac, the coats of which are thickened, though they yield to slight pressure; they are discolored, and infiltrated with pus and sanies.

The disease commonly proves fatal, either directly or by extension of inflammation to the ureters and kidneys.—*Rokitansky's Pathological Anatomy*, Vol. 2, p. 173.

3d. Pericystitis may be excited by inflammation of the vesical mucous membrane, extending into the encircling cellular tissue. Excited in this way, the abscess resulting may be diffused or circumscribed.

In regard to circumscribed abscess, Rokitansky says:

In other cases the disease has slight exacerbations from time to time being limited to a more or less circumscribed spot, which undergoes a slower process of suppuration, and at last becomes perforated. If, under such circumstances, the tissues external to the bladder have become the seat of inflammatory action previous to the occurrence of perforation, a diffuse extravasation of urine is prevented in one direction by inflammatory condensation of cellular tissue—in another, by free peritoneal exudation and agglutination to an adjoining organ. The circumscribed suppuration progresses slowly, and induces fistulous destruction of the tissues and communications between the bladder and the external surface of the body, or with other hollow organs.

It is more than probable that all circumscribed abscesses of the walls of the bladder, as well as of the walls of the urethra, are formed in the cellular tissue, and acquire their boundaries before the escape of urine from the urinary cavities. For it is well known that urine in contact with cellular tissue produces sloughing, not suppuration. The formation of abscess exterior to the urethra is no uncommon event in gonorrhœa; it is observed as attending sometimes upon the long continued wearing of a catheter in the urethra, as, for instance, in paralysis of the bladder. In stricture, the abscess sometimes occurs in front of the obstruction, and that, too, when no violence has been used in attempted catheterisation. Abcesses occur in the cellular tissue surrounding the rectum in cases of rectitis; in the cellular tissue of the neck in laryngitis; in the cellular tissue surrounding the vagina in vaginitis. These several facts, taken in connection with the appearances presented on inspection of the parts in the case related by Dr. Brandeis, all go to show conclusively, I think, that the abscess was formed in the cellular tissue of the bladder without any breach of the mucous lining of that viscus, and therefore without the contact of urine; that it must have long antedated the patient's arrival in this country; and that it contributed in no material degree to the patient's death.

Can circumscribed abscess of the bladder be diagnosed during life?

The only symptom evolved by abscess of the bladder is the inability of the patient to empty the organ completely, even when it retains its power of muscular contraction. In the case related by Dr. Brandeis, it will be noticed that the voluntary efforts of the bladder were not sufficient for the expulsion of all the accumulated urine, even when a large catheter was introduced; Dr. B. had to make pressure upon the hypogastrium in order to expel the urine. But in practice this symptom has not much significance, because it is notorious that when the bladder has been distended, and all obstacle to the expulsion of the urine has been removed, the muscular tissue of the organ is partially paralyzed by the distention. Then, again, the very inflammation of the bladder, out of which the abscess grows, has the tendency to cause paralysis of the muscular fibres.

The fetor of the urine, its muddy, brownish coloration, is not peculiar to abscess however large. The urine decomposes whenever too long retained, be the retention from whatever cause. If, however, the expulsive power of the bladder is perfect, and there is no mechanical obstacle to the expulsion of urine—no frequency of micturition, no abiding cystitis—and if at the same time the urine is opaque and fetid, then there may be good reason for supposing that there is, communicating with the bladder, a cavity in which the urine is retained long enough to undergo decomposition. The well known fact that in many cases of hernia of the bladder the urine is persistently fetid, gives some significance to the opinion advanced. When, however, it is remembered that limited abscesses of the bladder are commonly small, not often exceeding a pigeon's egg in size, it may properly be objected that in the great majority of cases the diagnostic signs indicated above could not be present, at least in a degree sufficient for diagnostic purposes—and this is true.

There are, however, other occasions in which the occurrence of abscess in the walls of the bladder may be determined during life. The following, occurring in my own practice, is one in point:

Mr. ——, æt 65, a resident of Indiana, and lately married, applied to me last spring on account of stricture of the urethra and partial retention of urine. He complained of pains in the region of the sacrum and perin, aæum sense of distressing fullness in the rectum, and an uncontrollable disposition to strain at stool. He had frequent desire to micturate, and could pass but little urine at a time. On examination I found a stricture just behind the glans penis, a prostate somewhat enlarged, and a tumor bulging from the base of the bladder and pressing upon the rectum. The tumor was tender to the touch, evidently contained fluid, and did not diminish in size when the bladder was emptied. Two days after my examination the patient went into the water closet, and whilst straining at stool felt something give way, and discharged a considerable quantity of bloody pus. He was much exhausted by this occurrence. The next morning I requested him to go to stool in my presence; he did so, and I found that the matters which escaped from the bowel were pus and urine.

Here, then, there was evidently a communication between the bladder and the rectum, which, in the light of the history of the case, could have been caused in no other way than by the formation of an abscess in the walls of the bladder, and its bursting simultaneously, or nearly so, into the rectum and bladder.

I dilated the urethra as rapidly as possible; placed a catheter in the bladder, and allowed it to remain there eight days, removing it only to clean it; and at the end of that time the urine had ceased to flow by the rectum, and ever since has passed by the urethra. Such cases are by no means rare, as is abundantly evident from the record.

ART. II.—*Uræmia and Ammoniæmia, their Nature and Characteristics;* being the substance of an article by PROF. JAKSCH, of Prague, in the "Vierteljahrschrift fur die Praktische Heilkunde," Band 2, 1860. Translated for the Louisville Medical Journal, by S. BRANDEIS, M. D., of Louisville, Ky.

There are two kinds of uræmia to be distinguished clinically. The first is uræmia proper, coming from the suppression of the renal function. The second I would denominate *ammoniæmia;* this is produced by the absorption of decomposed urine retained in the paralyzed bladder. For ten years I have paid particular attention to the study of these two conditions, have observed numerous cases during that time, and have arrived at the conviction that decomposed urine, (and consequently carbonate of ammonia) is imbibed by the blood. By this is caused a kind of uræmia which, in its symptoms and progress, is essentially different from that which obtains in Bright's disease. I have long since separated clinically these two diseases, and I will here relate briefly what I have been in the habit of teaching in my lectures on this theme.

In the acute as well as in the chronic affections of the kidney usually called morbus Brightii, the secretion of the elements of the urine is impaired, and accumulation of these elements in the blood is the necessary consequence. Not only uric acid and urea, but all the elements of the urine, are retained in the blood. Numerous chemical investigations and physiological experiments (nephrotomia) have shown that of all the ingredients of the urine, and before all, the urea is excreted by the stomach and intestines. It is also indisputable that the mucous membrane of the air passages and of the mouth and fauces, that even the serous membranes and the skin, are forced to a similar function, though in a less degree than the mucous membrane of the intestinal canal; and we are warranted in the inference that in higher degrees of the renal disease in question—and especially when the disease is of long duration, and associated with frequent relapses—exudates of a fibrous, purulent, and diphtheritic nature are accomplished in the organs just mentioned.

It is in rare cases only of morbus Brightii, such as occur in scarlet fever, or after suppression of the perspiration (for example, as may happen in puerperæ), that the function of the kidneys is so completely arrested as to prove fatal in four or six days from suffocation, the consequence of acute pulmonary oedema, or with cerebral disturbance, convulsions, and sopor. Severe febrile disturbance, generally commencing with rigors, frequent vomiting often without diarrhœa, and a rapid development of dropsy, are the concomitants of a persistent suppression or a marked degree of scanty and bloody urine. Frerichs (in his Monograph, p. 20,) describes clearly the anatomical and pathological condition in such cases. According to this author bloody extravasations occur in the malphigian capsules, by which extravasations, not only the malphigian bodies, but also the corresponding tubules are filled and distended; the parenchyma of the kidneys is distended by the extravasation, and thus is caused a displacement of the canals; besides, the canals of the cortical portions, and in a lesser degree the pyramids, are filled with coagulated fibrin.

It is undoubtedly true that the fatal result is due to the fact that the accumulation of urea in the blood is so rapid and so great that the excreting organ, the mucous membrane of the stomach and bowels, cannot afford even a temporary relief. The changes which the blood undergoes in its vital properties, and in its admixtures, are probably the causes of pulmonary œdema and fatal sopor.

Fortunately for mankind such cases of morbus Brightii are rare, for the reason that the acute forms of this disease are generally attended with only partial or temporary arrest of the urinary function. In such cases, along with the continued or more frequently the remittent febrile movement, the vomiting with or without diarrhœa, and the rapid or slow development of dropsy in the cavities and the cellular tissue, there is found scanty and bloody urine, (oliguria, hæmaturia,) which, should the disease run a favorable course, gives place, after a short continuance, mostly with universal and abundant perspiration and subsidence of fever, to bloody and profuse urine; and, lastly, this condition, when the cause has been such as to set up a curable form of Bright's disease, (as scarlet fever or cold,) passes in two, three, or four weeks, into simple profuse urine—polyuria. If we examine the urine in this stage we find either little or no albumen, and no fibrin casts. As Frerichs remarks, it is undoubtedly true that in such cases the malphigian capsules are unaltered by the disease, and that the coagula formed in the urinary canals are forced away by the current of the urine from the glomeruli. For this reason it is apparent that the urinary secretion has not been totally suspended, and that a high degree of uræmia has not been produced, because vomiting, diarrhœa, and profuse perspiration, have aided nature in the elimination of the urea.

On the contrary, the termination of such cases may be unfavorable, if frequent exacerbations and relapses take place; if, further, the urine which may have commenced to flow again is suppressed; in short, if those portions of the kidneys which previously were unchanged by the disease now become affected, or if those portions which had already been restored in function again become the seat of exudation. Catarrhal, croupous, and diphtheritic processes obtain in the mucous lining of the intestinal and air passages, exudations of a fibrinous, albuminous, or purulent nature occur in the pleura, pericardium, and less frequently on the peritonæum, or diphtheritic and gangrenous affections of the œdematous skin of the lower extremities appear; and, finally, a comatose condition with convulsions terminates the scene. (These diphtheritic and gangrenous affections are produced by the contact of the air with the urinary elements in the integuments, developing thereby carbonate of ammonia. This shows how dangerous it may be to make punctures and scarifications in such cases.

In the chronic forms of morbus Brightii without fever, the pathological changes in the kidneys are accomplished gradually, and in portions of the kidney at a time. The cortical substance or that lying between the pyramids is the seat of the disease.

The consequences which we have just mentioned, only take place either after the processes have extended, or after relapses, and after many of the malphigian capsules have become obliterated, and numerous urinary canals have been compressed and atrophied by new formed connective tissue.

The curability of the chronic forms of morbus Brightii depends essentially upon the circumstance that the morbid process must be terminated before the insufficiency of the kidney has reached a high degree—a condition which rarely occurs, inasmuch as the primary cause of chronic morbus Brightii is seldom removable.

I did not intend in these brief marks to give a complete description of the disease, but only to present in general terms the most important morbid appearances in reference to renal insufficiency, adding some corollaries:

1st. In simple albuminuria the urinary canals remain intact and permeable. For this reason, symptoms of uræmia never appear.

2d. These symptoms do not appear in those cases of true morbus Brightii with only a partial destruction of the kidneys, or when the disease terminates rapidly by quick restoration of the permeability of the urinary tubes.

3d. In mild degrees of uræmia, as long as the stomach and intestines contain but small quantities of ammonia, we find only slight catarrh of the intestinal canal. Serious pathological changes in the canal, like croup, gangrene, and diphtheritic processes, belong to high degrees of uræmia only.

4th. Rapid and complete arrest of the urinary function destroys life by cerebral affections, with no intestinal symptoms but vomiting.

5th. In rapidly forming and severe cases of morbus Brightii, ammoniæmia may be developed; but this form differs essentially from that variety which arises from the absorption of decomposed urine.

The following are the differences in a clinical point of view between the two forms of uræmia:

1st. The urine which is evacuated from the bladder yields, in advanced ammoniæmia, a pungent ammoniacal odor, showing that the urine is already undergoing decomposition in the bladder; while in uræmia following Bright's disease I have never seen this.

2d. I have never seen, in the particular kind of ammoniæmia to which I refer (from decomposed urine), dropsical affections, whether the case was acute and febrile, or chronic and without fever.

3d. In this affection I have always observed a dryness of the mouth and fauces, as complete as if dried with blotting paper. This dryness is not a mere sensation complained of, but the parts are visibly dry and shining. This dryness often extends to the nose, the conjunctiva, and the vocal cords—the latter showing itself in a feeble, hoarse voice, approaching aphonia. This is never seen in the uræmia of Bright's disease.

4th. The ammoniacal odor of the breath, and of the person when the bed clothes are lifted, is another characteristic of ammoniæmia which I have never seen in Bright's disease.

5th. There is also a persistent disgust for meat, especially for black meat, in well developed and even in slight cases of ammoniæmia, which has never been noticed in morbus Brightii.

6th. The severe intermittent rigors, simulating malarial chills, which occur in ammoniæmia, are never noticed in morbus Brightii.

7th. The convulsions and epileptic seizures, so common in Bright's disease, are never seen in ammoniæmia. So also the croupous or diphtheritic exudations on the mucous membrane of the mouth, fauces, air passages, on the serous membranes, and the skin, which are seen in morbus Brightii, are rare in ammoniæmia.

8th. The disturbances of vision, caused by exudation into the retina in Bright's disease, do not characterize ammoniæmia.

9th. Chronic ammoniæmia is constantly marked by a change in the color of the skin to a leaden hue, and by advancing emaciation. On the other hand, acute ammoniæmia is attended with rapid shrinking, collapse of the countenance, and a degree of muscular debility verging on paralysis.

10th. In all cases of acute ammoniæmia I have constantly noticed vomiting and diarrhœa—the latter coexisting with the former, or following it; while in the chronic form of the disease these symptoms were either temporary, or altogether absent.

11th. Sopor, existing for several hours or days, uniformly precedes death from either acute or chronic ammoniaemia.

12th. I will relate some cases hereafter which will serve to distinguish ammoniaemia from uraemia in their etiology, prognosis, and treatment.

Ammoniaemia may be acute, and with proper treatment terminate favorably in a few days, or it may prove fatal in from three to six days. A more or less frequent and obstinate vomiting is generally the first symptom of such acute cases, and if the progress of the disease is unfavorable, fever, sopor, and rapid collapse complicate the case. Chronic ammoniaemia may last for weeks and months —with occasional relapses and temporary improvements may even last for years, and perhaps even then terminate favorably if the affection is properly diagnosticated and treated; or, in spite of the latter, it may destroy life if the cause of the disease is not removable.

Chronic ammoniaemia generally progresses with gastric symptoms, which are often mistaken and treated for gastritis and intestinal catarrh. Febrile symptoms may appear in its progress; and thus when these symptoms last for a long time the disease may be mistaken for typhus, or when these intermit it may be taken for intermittent fever.

From what has been said it will be manifest that it were better not to attempt here to give a general idea or description of ammoniaemia, but rather to state the symptoms of the disease according to its different causes, and point out in brief terms the appearances common to all forms of the disease. Affections of the bladder are the most frequent causes of ammoniaemia, particularly those connected with torpor and paralysis; less frequently, the diseases of the ureters and kidneys.

Torpor of the bladder may be gradually developed, and lead to paralysis after a long time, or the latter may be developed suddenly. Accordingly the development of the symptoms of ammoniaemia may be so gradual, and the symptoms may be so mild, that both physician and patient may overlook them; or these symptoms may be developed so suddenly and violently as to excite the greatest alarm. Torpor of the bladder may be produced by prostatic enlargement, stricture of the urethra, defective innervation, or by textural diseases, as hypertropy, catarrh, inflammation, ulceration, and cancer. Decomposed urine and the carbonate of ammonia which the bladder contains may produce ulceration, diphtheritic processes, and gangrene, followed in turn by paralysis. The severity of the symptoms of ammoniaemia will in a given case depend not so much upon the pathological changes of the bladder, as upon the activity of the organs excreting the carbonate of ammonia, i. e. the lungs, skin, and intestines, and upon the age of the patient, his constitution, and the surrounding circumstances.

In reference to the latter, I have often had occasion to observe that the subjects of chronic ammoniaemia are generally relieved of their distressing gastric symptoms by a short residence in the country, and frequent exercise in the open air.

The following points are to be noticed in the diagnosis of the disease:

1st. The torpor of the bladder or its paralysis, the degree to which the paralysis has arrived, and the proximate causes of the same, must be determined before all else. In the gradual development of paralysis of the bladder it is noticeable that the loss of sensibility progresses *pari passu* with that of motion; thus, that the bladder may be so distended as to rise up to the umbilicus, and yet the patient will feel no pain or tenesmus—the latter being felt only when the accumulation extends beyond that measure to which, in the diseased state of the bladder, the patient is accustomed. Efforts at urination accomplish the expulsion of only a small part of the urine, the larger portion being still retained and undergoing decomposition. In acute paralysis there is from the commencement, generally, severe tenesmus and pain. The pains will gradually grow less after they have reached a certain height, and the detrusor has become incompetent to remove the impediment. The loss of sensibility will therefore precede the loss of motion.

2d. The absorption of decomposed urine and the production of ammoniæmia take place contemporaneously with the advancing torpor and paralysis of the bladder. It is obvious that catarrhal secretion, exudates, and blood, hasten the decomposition of the urine. The urine, on examination, gives a distinct ammoniacal odor at the moment of its expulsion, at the same time it will be turbid with a mucous or purulent sediment, in which sediment uric acid and its combinations will be precipitated; or, if mixed with blood, the urine will have a dirty brown, or reddish, ichorous appearance.

3d. The reception into the blood of carbonate of ammonia is in all probability immediately followed by the excretion of it by the lungs and skin. The appearance of a pungent ammoniacal odor in the breath and from the skin is evidence of a high degree of ammoniaemia. When the ammoniacal odor is not plain to the sense, then Frerich's test, a rod moistened with hydrochloric acid and held before the mouth, will show the peculiar white vapor, or a piece of litmus paper used in the same way will change its color. The same tests will doubtless show the presence of ammonia in the expired air in certain states of Bright's disease, but this only proves that ammoniaemia may be developed in certain states of Bright's disease. In the ammoniaemia of which we treat, the pungency of the ammoniacal odor is the diagnostic point, but in that of Bright's disease I have never noticed any pungent ammoniacal odor. It is not practicable to present any sufficient analysis of the blood, for the reason that patients laboring under the disease will not bear the requisite bloodletting.

4th. The gastric symptoms are always present in ammoniaemia. In acute cases, vomiting, followed by diarrhœa, is constantly noticed. The ejecta do not have in the beginning an ammoniacal odor, but in relapses the odor is plain. In chronic ammoniaemia, vomiting and diarrhœa are often absent; on the contrary there is torpor or constipation of the bowels; but the appetite is materially impaired, and in regard to meat especially, is nearly abolished. In some cases the disgust for meat is so great that the sight of it, or the mention of it, excites nausea. The disgust for meat is greater in this than in any other disease, even in fever and cancer of the stomach in which the symptom is so well marked.

The dull pain and sense of constriction, of burning, in the region of the stomach, the accumulation of flatus, the the bad taste in the mouth, the eructations, coated tongue,

&c., are not peculiar to ammoniaemia, though always present; but the sensation of dryness in the mouth and fauces and the actually dry condition of the mucous membrane of the soft and hard palate, and of the posterior wall of the pharynx, are essential diagnostic signs of ammoniaemia, and will often be the first to call attention to the true nature of the disease. These mucous membranes appear red, varicose, dry, and shining; at later periods this aridity extends to the nasal cavity, conjunctiva, and vocal cords, the voice becoming weak, hoarse, and cavernous (hohl klingend.) Finally, advancing emaciation, a lead-colored tint of the skin, a senile expression of countenance, and depression of mind often taken for hypochondria, are to be mentioned.

Cases of chronic Ammoniæmia simulating gastric catarrh.

CASE I.—A vigorous young merchant, aet. 38, suffered for several months with a dyspepsia, which resisted various medicinal and dietetic measures. The man, who was formerly muscular and vigorous, became pale and emaciated. His black hair turned grey, and his cheerfulness vanished. He first abstained from meat and liquors; afterwards he resumed the use of beer and wine; he took much exercise in the open air, and made a trip to the country—but all in vain except some temporary improvement of digestion. When I first saw the patient, I thought that his gastric disorder might be caused by his residence being close to a privy. To the same cause I attributed the ammoniacal odor which I perceived in his room. Consequently I persuaded him to remove to a well ventilated and lighted room. I administered bitters and tonics, but to no good end. His anorexia and furred tongue persisted, and a severe diarrhœa came on. I now asked the patient if he did not suffer from difficult micturition. He admitted that he had made his urine with difficulty for several years, but without pain, and that he had suffered from gonorrhœa several years ago. I was astonished to find on examination that the bladder rose two fingers' breadth above the symphysis, and all this without pain or tenesmus. An exploration with a catheter revealed a stricture of the membranous portion of the urethra. After this was removed by Professor Guentner, I advised a chalybeate water, a full diet, and frequent exercise in the open air. In a short time the patient recovered his health completely.

CASE II.—I was called in March, 1858, to see Mr. J. H., aet. 29, a practicing physician in S——. He had suffered from chronic gastric catarrh for three years, had been under advice of a neighboring physician, and was on the point of going to Carlsbad. Medicines of all kinds, bitter, solvent, and aromatic, had been used without success. The patient, in relating his history, told me that he suffered from great dryness of the mouth and throat, which was relieved only temporarily by drinking. When I questioned him about difficulty in voiding urine, he admitted with hesitation that he had suffered for many years from this cause, but thought there could be no connection between it and his gastric disorder, as no physician whom he had consulted had even questioned him about it. I forthwith examined his abdomen, and found the bladder extending three fingers' breath above the symphysis without the patient's feeling any inconvenience, except some sense of dull pressure in the region of his stomach, which sensation he referred to the condition of his stomach. He confessed to a gonorrhœa and chancre during his stay at the University; he had the scar of a bubo. Finding on examination with the catheter a serious stricture of the urethra, I advised him to go into our hospital and put himself under the care of my skillful colleague, Dr. Pitha, in place of going to Carlsbad. My advice was followed. Dr. Pitha succeeded with great difficulty in passing a small catheter, and drawing off the urine. This fluid had a pungent ammoniacal odor, and a copious muco-purulent sediment.

After the operation the patient had some vesical tenesmus and evacuated his urine guttatim. At first it seemed that the stricture would yield to dilatation, but soon fever made its appearance, occasionally interrupted by rigor. The patient complained of pain in his loins, great muscular debility, and confusion of intellect; soon afterwards pain in the chest, dry cough, and dyspnœa came on. All sense of suffering gradually disappeared, his memory began to fail, and he grew totally indifferent to passing events. A discolored and ammoniacal urine escaped involuntarily and in drops, a persistent sopor came on, and in this he died on the 22d of April.

Autopsy disclosed bilateral nephritis with abscesses; cystitis, with numerous abscesses in the walls of the bladder; cicatricial contractions of the urethra; fistulous openings in its neighborhood; pneumonia on the left side; (red-brown hepatization); thickening of the meninges; internal and external hydrocephalus.

Chronic Ammoniæmia may run its course, simulating chronic intestinal catarrh.

CASE III.—I was called in 1853 to see a merchant, sixty-two years of age, who had suffered for many months from weak digestion. He was much emaciated and very weak. Many medicines had been used for the relief of his gastric disorder. For several weeks prior to his application he had suffered from an uncontrollable, painless, and exhausting serous diarrhoea. The ammoniacal odor of breath, and the hoarseness of voice, at once excited the suspicion of ammoniaemia. I examined the abdomen forthwith, and found the bladder extending to the umbilicus. The dull pain, which my manipulation developed, he referred to his gastric catarrh; and, as he had always evacuated the bladder voluntarily, retention of urine was unthought of. The evacuated urine had a strong ammoniacal odor. I advised the frequent introduction of the cathetèr in order prevent any great accumulation of urine, a milk diet, and a sojourn in the country. From this time the patient improved from day to day. The diarrhoea ceased first; the appetite improved so that the patient could bear meat; the strength increased so that in a short time he could resume his business. I lost sight of the case for some months, but learned afterwards that he died of a disease of the urinary organs.

This case shows that the practitioner cannot safely rely upon the statement alone of the patient that he can discharge his urine without pain, for, notwithstanding this, there may be accumulation in the bladder. No stricture of the urethra, nor any textural change in the bladder, being present in this case, nothing is left but the supposition of senile torpor.

Ammoniaemia progressing with continued fever, and typhoid appearances.

Case IV.—J. E——, merchant from Petersburg, aged 58, had been suffering for twenty years with great torpor of the bladder without stricture of the urethra. He himself ascribed his suffering to excessive venery, and to the circumstance that as a traveling merchant he had ridden much on stage coaches, and had thus been frequently compelled to retain his urine for a long time. He found himself in Paris with so great a degree of torpor of the bladder that he had great difficulty in voiding his urine. There he consulted Civiale, who made some curative attempt, but as the patient could not remain he was advised to apply the catheter himself several times per day. Civiale intended by this to prevent the retention and accumulation ot urine until the patient could reach Petersburg and obtain medical assistance. But this wholesome advice was followed in part only. The catheter was passed daily—nothing more. I saw the patient twenty years after this, when he had retired from all mercantile pursuits. In the meantime he had married, was the father of one child, and he now sought of me remedies for the debility of his bladder. Finding no traces of uraemia, the patient well nourished, with a good complexion and an excellent appetite, and there being no signs of vesical catarrh, I tried for some time tonic and anti-paralytic medicines without success. Finally I advised my patient to go to Kissingen and drink Rakoczy water. He returned essentially improved, feeling occasionally a desire for micturition, which had not been the case for a long time. He was able, though with some effort, to evacuate his bladder. Highly pleased with this he laid aside the catheter, contrary to my advice. In a few days he noticed a failure in his appetite, a disgust for meat, and inability to sleep on account of dryness of the throat. When he consulted me again I explained to him that his symptoms were due to neglected catheterization, and the accumulation and decomposition of urine. He resumed the use of the catheter, drank Giesshuebler water, and in a short time recovered his color, appetite, and sleep. He then went to the country, where he recovered so far that he was again enabled to micturate. The latter circumstance, and the remark of a friend, that frequent catheterization paralysed the bladder, caused him a third time to discontinue the use of the catheter. The improvement did not last long. I soon received a summons to visit him at his country seat, where he was said to be sick of typhus, to have had fever for several days, with loss of appetite, diarrhoea, great muscular debility, and nocturnal delirium. In my conversation with the attending physician I learned that the patient had made no mention of his urinary trouble, and had thus caused the doctor to take his symptoms to be those of typhus. The absence of a splenic tumor, the distention of the bladder up to the umbilicus, and the ammoniacal odor which was perceptible as soon as the bed clothes were lifted, confirmed me in the diagnosis of ammoniaemia. The catheter was forthwith introduced and a large quantity of ammoniacal urine was discharged. By the frequent application of the catheter and the use of Giesshuebler water, the fever and diarrhoea soon disappeared, and the appetite returned so as to allow the exchange of milk for flesh. There was nothing left but vesical catarrh. He recovered in three weeks. The next year he again visited Kissingen, but without benefit. The vesical catarrh and torpor remained unchanged. When I was consulted several months later, the mucous and blood in the urine, and the severe shooting pains in the perineum, induced me to examine the bladder with the probe. By this I discovered a stone. Dr. Pitha being now consulted, he, at the earnest solicitation of the patient, performed the operation of lithotomy, which resulted in the extraction of several calculi. Death followed.

This case shows that torpor of the bladder may exist for a very long time without ammoniaemia under a proper use of the catheter. As soon as vesical catarrh occurred ammoniaemia was developed in spite of the use of the catheter. At a later date the calculi were formed. Operative procedures are very dangerous in the presence of ammoniaemia. There are numerous cases to show that when operations are performed in the presence of ammoniaemia, rigors, vomiting, and sopor follow.

Ammoniaemia simulating pernicious intermittent fever.

CASE V.—I was called in 1847 to see a high military officer, stationed in B., a place where intermittent fever prevailed. He was said to be suffering with pernicious intermittent. He was in the third paroxysm when I saw him. The great stupor and muscular debility under which he labored, gave great alarm to his physician and relations. I found the patient seemingly moribund, collapsed, unconscious, breathing stertorously, with increased temperature, and a small and frequent pulse. An examination of the spleen gave a negative result; but the bladder was distended to the umbilicus, and the exhalations were strongly ammoniacal. I received in answer to my question in regard to urinary trouble, that the patient had never complained of any. I tried to introduce the catheter, but the urethra was so tightly strictured that I could not succeed. I requested my colleague, Dr. Pitha, to come to my assistance, prepared to puncture the bladder; he succeeded in introducing a very small catheter, and withdrew the urine, which had a strong ammoniacal odor. A few doses of musk brought the patient to his senses. By the frequent withdrawal of the urine, and by the administration of soups, he so far recovered in a short time as to leave his bed and walk about. Professor Pitha then treated him for the stricture, and he recovered so far that he was able to participate in the Hungarian war, and stood its hardships without loss of health.

This patient would doubtless have been lost but for a proper diagnosis and treatment of the case.

Sometimes during the progress of Ammoniaemia a single rigor with exquisite febrile paroxysm makes it appearance, which paroxysm will recur only after several months. The following case illustrates this:

CASE VI.—I was called in 1847 to a merchant, A. H., 55 years of age, who, while at work in his store, was suddenly seized with a severe rigor. I saw him while he was yet in the rigor: he was remarkably collapsed; his countenance was shrunken; he had some muscular tremors; the pulse was rapid and small; and he was so far unconscious that he could not answer a question. The rigor in the course of an hour gave place to a burning fever, and this was followed by a copious and general perspiration. A beginning pneumonia, or an intermittent, suggested itself to my mind, but the spleen showed no abnormity, and the physical examination of the lungs did not reveal any disease there. On examination of the abdomen the bladder presented a large globular tumor above the symphysis. On questioning in regard to urinary trouble, I learned that the patient had been suffering for several years from debility of the bladder, the consequence of hemmorrhoids; that he repeatedly used the Carlsbad water cure; and that it takes him from ten to fifteen minutes to evacuate the bladder. An examination with the catheter resulted in the discovery of several strictures of the urethra; these were removed by Prof. Pitha. The use of ferruginous waters completed the cure. He has had no relapse. Formerly, when haemorrhoids played a principal part as a morbific cause, how often strictures of the urethra have been overlooked, and diagnosticated as haemorrhoids of the bladder, those only can understand who have lived in a time when the diagnosis of diseases rested upon subjective symptoms, and all appliances for an objective examination were utterly neglected!

Diseases of the Prostate are of equal importance with with stricture of the urethra in the malady in question. Soemmering, in his prize essay, has mentioned enlargement of the prostate as a frequent cause of urinary trouble in old men. Of the diseases of the prostate we have to mention particularly: atrophy, subsequent to inflammation; general or partial hypertrophy; and the development of accessory tumors in the direction of the urethra or the neck of the bladder. Difficulty of urinating, torpor of the bladder with or without hypertrophy of the walls, vesical catarrh, disease of the ureters, of the renal pelvis, and of the kidneys themselves, and ammoniaemia, sooner or later, are the consequences. The urethra is by prostatic enlargement either compressed or displaced. Cases of this description, as well as those of partial hypertrophy of the accessory lobe, give rise to very unfavorable prognosis, on account of the difficulty of surgical treatment, and the dangers connected with them. The cases in which the urethra is compressed by simple hypertrophy are less dangerous. In such cases I have often gained a happy result, even when the bladder had already reached a certain degree of torpidity, and when catarrh and scattered symptoms of ammoniaemia have made their appearance. I usually advise a strong ointment of the iodide of potash to be applied to the perinaeum, the internal use of a chalybeate, the frequent and careful application of the catheter, and after that for the removal of the torpor a decoction of ergot.

Case VII.—A patient, 70 years old, a day laborer, said to have been always healthy up to four months ago, after having travelled on foot for three hours in very cold weather, and after the use of some beer, was taken with a cutting pain in micturition; he noticed at the same time that the urine was turbid and bloody. Since that time he has been constantly troubled with pain in the region of the bladder, and strangury, followed by enuresis, no blood afterwards appearing in the urine. Although his appetite was good and there was no disgust for meat, no vomiting nor diarrhoea, still he had constant dryness of the mouth and increased thirst. When he was admitted into the hospital his bladder was found moderately distended; the urine dribbled away involuntarily; and the bladder still appeared to be distended after the desire for micturition had passed off. The urine when tested proved alkaline; it contained neither blood nor albumen. On the 15th of June, eight days later, he was suddenly seized with a severe pain in the vesical region, with haematuria and high fever. After this he lost appetite, had an aversion to meat, severe thirst, dryness of the mucous lining of the mouth and fauces, and collapse of the countenance. The urine, which was now removed by the catheter, had a fœtid, bloody, and purulent deposit. The skin was lead colored and shrunken, and covered with a clammy perspiration; the pulse was 69, arteries rigid; respiration 44. The introduction of the catheter showed impediment in the prostatic urethra; this could easily be avoided by lateralizing the instrument. An examination per anum showed partial enlargement of the prostate. A serous diarrhœa made its appearance soon, followed by delirium, sopor, and death.

Autopsy.—Both kidneys enlarged to triple the natural size, and the substance of each interspersed with purulent foci. The bladder distended, the walls four millimetres thick. Prostate, atrophied about one half, uniformly fibrous and condensed; on the inner surface of the left lobe an oblong tumor of the size of a bean, by which the urethra was compressed perfectly on one side, and the caput gallinaginis pushed to the other.

The next case is that of a cashier of a large manufacturing house, who was accustomed, for many years, to retain his urine, during business hours; the result was that the bladder grew torpid. When I saw him this torpor of the bladder was already far advanced; he was emaciated; he was feeble; and gastric disorder was already developed. Although the urethra was unobstructed, the bladder was distended, without pain or tenesmus. The walls of the bladder were hypertrophied, as was shown by the existence of a hard globular tumor above the symphysis, and the strong and prominent trabeculae which could be felt with the catheter. Notwithstanding the use of the catheter, ergot, and strychnine, the condition of the bladder remained unaltered. Subsequently, vesical catarrh was developed, and the patient perished with ammoniaemia. This case shows that without urethral impediment, long-continued voluntary retention of urine is apt to produce hypertrophy of the walls of the bladder. It further shows that the greater the textural disease of the bladder, the less prospect for cure.

Calculus of the bladder is generally known to produce death by ammoniaemia. We find this statement in all surgical works, though the symptoms are interpreted in another light.

CASE IX shows how rapidly *ammoniaemia proves fatal when complicated with ulceration of the bladder.* [The case is too long for our space.—*Translator.*]—The author remarks in the conclusion of the case: Uro-lithiasis is one of the most common and important causes of ammoniaemia. Although these cases will inevitably terminate fatally without operation, the result of every operation will be influenced by this cachexia, and every wound made in the operation will be followed by diphtheria and gangrene.

In cases of *cancer of the bladder* I have always observed up to this time that death is produced by ammoniaemia. The furgoid granulations on the inside of the bladder lead to haemorrhages, which afford the first occasion for decomposition of the urine, and ammoniaemia, and life is destroyed rapidly or slowly.

Of the causes of ammoniaemia which lie *in the ureters*. I have seen two fatal cases; the first died of uraemia, and the second of ammoniaemia. In each one kidney was atrophied, and the ureter of the other side mechanically obstructed.

CASE X.—J. T——, merchant, æt. 64, has had for five years, pain in the left lumbar region, which would at times remit. Never had fever but had gastric derangement. Had a sense of pressure upon the stomach; disgust for meat; ructations; bad taste in the mouth, coated tongue, dryness of the mouth and fauces; great thirst; constipation; yellowish skin; emaciation and debility. The use of Carlsbad water gave relief, and when drunk at the spring an apparent cure was made. In 1859, the same pain commenced on the right side. The first symptom was dull pain in the right lumbar region, connected with vesical tenesmus, particularly at night, and followed by the discharge of only a few drops of urine. After this date the pain increased, and the urine showed some mucous and blood. With increase of pain in the kidney, nausea, restlessness, anxiety, and arrest of urine came on. The bladder was found empty and healthy. Three days after the appearance of anuria, a small quantity of mucous and bloody fluid was discharged, and immediately after this again several pounds of urine in the course of a few hours. Subsequently it was diminished for three days—and then followed nine days in which it was totally arrested. At the end of this period the patient died. During the last nine days the abdomen became more and more enlarged, and in front of and above the right ilium a tumor appeared. It was connected with pain extending from the vertebræ to the right ilium, percussion with a plessimeter pressed firmly upon it gave a dull sound. The symptoms of full ammoniæmia appeared only in the last nine days. The appetite at this period disappeared, the mucous lining of the mouth and fauces became dry, the exhalations of the skin, as well as the expired air, had a had a strong ammoniacal odor. Patient vomited once, had no diarrhœa nor fever. In this state of things muscular debility increased rapidly; the countenance shrunk; somnolence, apathy, and sopor closed the scene. No examination *post mortem* could be had.

There are strong arguments in favor of the opinion that there was in this case acute ammoniæmia, caused by obstruction of the right ureter, and atrophy of left kidney. If in this case the left kidney had been acting, there could have been no complete suppression of urine, for the pain and other symptoms were confined to the right side. The elastic tumor in and above the ilium, the sudden suppression of urine, and the equally sudden reappearance of a copious discharge of urine, leave no doubt that the obstruction must have been in the right ureter; and this must have caused dilatation of the ureter, pelvis, and calyces, proportionate to the anuria. The reappearance of the renal discharge, and the sudden suppression of it, can easily be explained by the existence of a renal calculus lodged in and obstructing the ureter. By the increasing vis a tergo of the urine accummulating above the calculus, the ureter will be dilated, and this dilatation will extend to that part of the ureter which surrounds the calculus. In this way the walls of the ureter are dilated and the urine passes by the calculus. But this condition does not last long, for the calculus, forced onward by the vis-a-tergo, comes down to the undilated portion of the ureter, and thus the obstruction is re-established. In this way even large concretions may reach the bladder. And if the other kidney is active, this process may last for a long time, and be attended with no danger.

I have seen a similar case of impermeability of the ureter in a servant girl, 28 years of age, whom I had in my clinic in 1857. She died after complete suppression of urine, lasting for 21 days. During this time she had anxiety, restlessness, and in the region of the left kidney constant and severe pain, occasionally undergoing aggravation. She vomited five or six times daily; the matters ejected were loaded with the salt of ammonia. She had no diarrhœa, no disgust for meat; but the eating of meat caused vomiting to so great a degree that she refused to partake of it, and used milk instead. There was no ammoniacal odor in the breath and perspiration; there was no dryness of the mouth and fauces, and no mental disturbance. The dilated pelvis could be felt distinctly. The daily vomiting was arrested for several hours; convulsions came on, followed by sopor and death. The autopsy showed the mucous membrane of the stomach and duodenum moderately ecchymosed, the ilium and cœcum extensively so. A tumor was seen protruding under the flexure of the spleen, containing yellowish urine; this was found to be the expanded renal pelvis. The ureter was found stretched, collapsed, and compressed on the surface of the tumor. The left kidney was considerably enlarged; there were old ciratrices on its surface; the calyces and pyramids were atrophied. The right kidney was destroyed; its ureter was permeable for three inches and no more. The bladder contained a few drops of milky urine.

This was a case of uræmia, inasmuch as the symptoms proper to ammoniæmia were not present during the progress of the case. In explanation of the fact that the urine contained in the pelvis of the kidney did not decompose, I can only mention the circumstance that the dilated pelvis had suffered no disease of its coats; whilst, in the case mentioned above, the lining of the ureter was inflamed, and afforded catarrhal discharges.

I have seen one case of *tuberculosis of the kidney*, in which tubercular cavities were excavated, and in which there was putrid urine. All the symptoms of ammoniæmia were present.

I am not able to give a decided opinion upon the relation of *renal abscess* to ammoniæmia, as all the cases which I have observed were complicated with diseases of the bladder, sufficient in themselves to account for the symptoms. I treated one case, in conjunction with Prof. Pitha, in which, although there were numerous abscesses scattered through the kidney, there were no symptoms of ammoniæmia. In this case an abscess from perinephritis ruptured through the dorsal muscles, and of this latter disease the patient died.

I have never seen ammoniæmia connected with *cancer of the kidney.*

Having now mentioned all of the diseases of the urinary organs which are usually connected with ammoniæmia, I will next mention one form of the disease distinguished by its rapid course. This is the ammoniæmia produced by the escape of *decomposed urine* into normal textures.

I was called in 1844 to a half pay captain, æt. 54, who had suffered for a long time with gastric disturbance and difficult micturition; had grow thin and feeble. At 9 o'clock, A. M., he felt a severe pain in the perinæum while straining to make water; this pain persisted, with great intensity, when I saw him one hour later. Soon after, the patient was taken with nausea and rigors; obstinate and persistent vomiting soon set in. I found the patient still cold, with rapid small pulse, great muscular debility, and a collapse of the countenance which I have only noticed in cholera. With a weak voice the patient complained to me of a severe pain in the perinæum, which was hot, swollen, tense, elastic, painful, and discolored; on examination with a catheter, a considerable stricture was found in the urethra. His history, the fact that he had been discharging a bloody and slimy urine for several days, and finally the pungent ammoniacal odor perceptible on approaching him, left no doubt that, in consequence of the stricture, a disease of the bladder has existed for some time, causing ammoniæmia, and, furthermore, that an ulcer must have perforated the urethra, allowing the escape of urine, already decomposed, into the neighboring connective tissue. As the brain became more affected and the apathy increased, the vomiting gradually disappeared, and was finally arrested with the appearance of sopor. On the evening of the same day the patient could not be aroused. With gradual decrease of the temperature of the skin, and the gradual acceleration of the small irregular pulse, and stertorous respiration, the patient died early the next morning, after an illness of twenty hours duration. I have seen two other cases, in which, on account of the impermeability of the urethra, puncture of the bladder had to be made. In these the progress was equally rapid. One of the patients, æt. 50, died in two days, and the other, æt. 70, died on the third day after the operation was performed. In both cases the decomposed urine, extravasated into the cellular tissue, caused forthwith severe pains and rigors, followed by collapse, disturbance of the intellect, sopor, and death. In both cases constant vomiting began with the rigors and continued until sopor came on, but there was no diarrhœa. Both patients had suffered for several years with difficult micturition; the first in consequence of stricture, the second from prostatic disease. In both cases the fatal termination was due to the decomposition of the urine in the bladder.

Before I leave this subject I wish to draw attention to some other conditions and diseases in the progress of which paralysis of the bladder and decomposition of urine are apt to produce ammoniaemia in a short time. I refer to paralysis of the bladder which appears in healthy persons in consequence of a cold.

The following case will show my meaning: Mr. M., factor, æt. 65, was taken sick after supping, on a cool May evening, in the open air. During his walk home he felt considerable tenesmus, which he could not satisfy. Reaching home he again tried to make water, but as nothing escaped after long straining he went to bed. He felt the desire to urinate next morning, but could not, despite great abdominal effort. On account of this he remained in bed, applied cataplasms, and, feeling well in other respects, he sent for no medical aid. On the night of the third day, fever and vomiting made their appearance, and I was sent for. I drew from the distended bladder a large quantity of turbid and ammoniacal urine, after which the vomiting ceased. The disgust for nourishment, and the great exhaustion, increased in spite of medication. The next day somnolence and sopor appeared, and death followed on the morning of the sixth day. Although the patient had made no complaint before he had partaken of beer of bad quality and been exposed to cold, I am still inclined to the belief that he must have suffered unwittingly from senile torpor of the bladder previous to his attack.

Senile torpor of the bladder may be developed in advanced age, at 50, or even before, without any mechanical impediment to the flow of urine. What circumstances influence the early or late appearance of torpor, whether venereal excess, or retrograde metamorphosis, cannot always be determined in the concrete case. But so much is certain, that it may originate either from defective innervation, or from senile atrophy and fatty degeneration of the detrusor fibres.

The following appearances will assist in the diagnosis of torpor: The subjects of this disease are able to urinate only in a short and interrupted stream, and this only with the vigorous co-operation of the abdominal muscles; if the latter is wanting, the urine will flow in drops. In such patients, although the stream of urine is of its normal size, a much longer time will be required for the evacuation of the bladder. If the torpor has reached a higher degree there will always be more or less urine stagnant in the bladder, although the patient will feel that his bladder is completely emptied. If, after such an evacuation, the patient presses patiently and perseveringly on the abdomen, the urine will again commence to flow. If the patient is, immediately after urination, examined with a catheter, more or less urine will be found in the bladder. This quantity increases with the increasing torpor, and thus cause is given for acute or chronic vesical catarrh. In such cases nothing more than a cold, or a long voluntary retention, is required to call forth at once paralysis of the bladder. In our patient such a torpor of the bladder must have forerun the cold, otherwise such an insensibility of the bladder could not have existed as to allow so long a retention of the urine without severe pain.

Amongst the diseases in which paralysis of the bladder may be a symptom, we must mention before all *typhus*. It is often the case in localized or unlocalized typhus that the general sensibility is so far impaired that muscular debility reaches even to paralysis. In these cases if the retention is overlooked, and urine accumulates for a long time, vomiting will occur even though the general sensibility is impaired. The vomiting will cease immediately and never return if the urine is carefully withdrawn. This symptom in grave typhus should warn the physician to examine carefully the bladder.

However, ammoniæmia may appear in typhus in another way, viz: towards the end of the disease, through vesical catarrh, erusions, and croupous exudations. I have seen two cases of typhus, however, in which the last named processes existed without ammoniæmia. In both there were pain in the bladder, hæmaturia, paralysis, exudates, and necrotic detritus in the urine.

Besides typhus we have to mention acute *affections of the brain.* Extensive meningitis and cerebritis will often be connected with vesical paralysis. Here, however, the careful examination of the bladder, so constantly practiced in delirium, has in my practice prevented the occurrence of ammoniæmia. This is not the case when paralysis is due to *disease of the medulla*; here, notwithstanding the most careful management of the bladder, it is impossible to prevent ammoniæmia.

Paralysis of the bladder and vomiting may occur during *dysentery.*

In conclusion it may be proper to add the following corollaries:

1st. Uræmia and ammoniæmia are two morbid conditions different from each other, and each causing its peculiar symptoms.

2. Both denominations have reference to the most important elements of the urine received into the blood, in uræmia to urea, and in ammoniæmia to carbonate of ammonia. It is obvious that, besides those just named, other elements and products of decomposition are found in the blood.

3 Ammoniæmia, at least its symptoms, were known to our predecessors under the names of uroplania, urodialysis, ischuria, paralysis vesicæ, etc. The word ammoniæmia, as suggested by Treitz, I have adopted, as giving most strikingly its contrast with uræmia.

4. The uræmia of Bright's disease runs *pari passu* with the renal insufficience.

5. Ammoniæmia has its starting point either in the urinary organs, by resorption of decomposed urine (carbo-

nate of ammonia). or in the intestines (urea secreted by the latter, and transformed into carbonate of ammonia), not only in Bright's disease, but in all diseases connected with insufficiency of the kidneys. The symptoms of the latter kind of ammoniaemia never reach as high a degree as those of the former.

6. The excretion of the urea retained in the blood in consequence of renal insufficience, is performed by the mucous membrane of the stomach, intestines, and air passages, furthermore by transudations of serous membranes, of the intrestitial connecting tissue, and sometimes of the skin.

7. The excretion of carbonate of ammonia in ammoniaemia is accomplished through pulmonary exhalation, the skin, and the mucous membrane of the stomach and intestines.

Abstracts and Selections.

On some Considerations in the Treatment of Phthisis. By Edward Smith, M. D., L.L.B., Assistant Physician to the Hospital for Consumption, Brompton.—[A normal alkalinity of the blood is absolutely essential to the proper performance of the combustive process, whilst acidity is necessary to the formative process, (hence the muscular fluid, and, indeed, the fluid of every tissue has an acid reaction), therefore,]

Excessive waste in the system will occur from two different causes; viz., from excess of acid and excess of alkali; and each, perhaps, is equally injurious. Now, we know that acids and alkalies constitute the great part—indeed, flon reection, we might say almost all—of the remedies in phthisis, as, indeed, in most diseases; and by practice we attain to a sort of undefined notion as to the cases in which they are respectively applicable. The difficulty is to determine with accuracy these respective states. In reference to the acid state of the blood, I think we may always affirm that unusual acidity of the excretions (not due to local states of disease of the excreting organs) indicates an excess of free acid in the blood; and, in phthisis, I am disposed to consider the state of the skin-excretion as the best indication of this state of things. If, in such cases, I find that the perspiration has a sour odour (and the number of such cases is legion), the administration of a combination of the carbonate of soda and potass, say fifteen or twenty grains of each combined, or of the acetate of ammonia, thrice a day, is followed by the happiest results; and the measure of the effect is still the state of the perspiration. This immediately tends to increase the oxygenating process, but it does not of necessity remove that state of assimilation by which an undue amount of acid is thrown into the blood (assuming that, on inquiry, the excess of acid is owing to that circumstance); and hence a reduction in the starchy and saccharine food, and the invigoration of the system by change of air, etc., must be added. The amount of perspiration does not guide us in this matter; for in many cases, with excess of acid, there is profuse sweating; and with profuse sweating we are accustomed to associate acid in our treatment, yet, in such cases, the proper administration of the alkali tends to remove this excess of perspiration. I have recently had a case of early phthisis under my care, in which there was a constant excessive elimination of acid by the skin, and which, without other symptoms than excessive and general exhaustion and wasting, did not progress satisfactorily during three or four months. Under the influence of the combination of potass and soda, he had a very profuse sweating, accompanied by an exceedingly acid and acrid odour; and obtained immediate and almost marvelous relief. The following is a short account of this case:

J. E., a young single man, aged 20, engaged in a grocer's shop in the country, had complained for three months of bad appetite, with brown tongue, foul breath, and slight emaciation. There was slight hæmoptysis occasionally, with slight dyspnœa. There was scarcely any cough, but the throat had been sore from the commencement of his disease. The general expression of the symptoms was nervous exhaustion and muscular debility. The chest presented no signs of disease, except the slightest shade of dullness on percussion, and lessened respiration on the left side.

On August 21st he began to take iron, with a mineral acid and quina. Cod-liver oil was added on August 28th. In September, he continued in the same state, but with a little increase in cough and debility. In October the cough continued, but he felt a little general improvement. There was also a little pain in the left breast. His state was becoming more anaemic; and the iron, being intermitted for a time, was renewed in November. During all this period he took out-of-door exercise, used salt and water ablutions, and was directed to take milk and other nutritive kinds of food at short intervals.

Thus three months passed away, without any visible improvement; and the progress of the lung-disease appeared iminent. At the end of November, however, he had a most profuse sweating during four nights, in frosty weather, accompanied by a sour and exceedingly acrid odor, which appeared to be the crisis of his condition; for, under the influence of bicarbonate of potass and gentian, he improved most rapidly, and the increase of perspiration, with its acid state ceased in December. Throughout January he continued to improve, and became again cheerful, active and strong; and the cod-liver oil being again prescribed at the beginning of February (it having disagreed with him in the early part of his attack), caused so much improvement in a fortnight, that he was led to look upon it as the principal means of his restoration to health. I cannot but think that, if the alkaline treatment had been begun earlier, we should have been spared some anxiety. The case shows well the peculiar condition of the blood under discussion, the efficacy of the remedy, and the different action of the oil under the two conditions.

It is in this class of cases that I believe fats to be most beneficial, if their administration is preceded and accompanied by the administration of these alkalies. There can be no doubt that the administration of starch tends largely to increase the acidity of the blood; and there is reason to believe that the action of the fats (the other common hydrocarbonaceous material) tends in the contrary direction—a belief based upon the physiological action of fat upon the respiration, the influence of fat over oxygenation, its beneficial action in cold climates, and its influence under the condition now being discussed. Hence I think that the state of the perspiration offers an important guide for us in the administration of alkalies and fats. A similar remark may also be made in reference to the action of numerous nitrogenous substances over the respiratory functions, for my experiments have proved that they have this action, and also that it is an indirect one by influencing the rapidity of the oxygenating process, and not a direct one by supplying carbon. As I have recently discussed these subjects elsewhere, ('Philosophical Transactions, 1859; Philosophical Magazine,' December, 1859; 'Dublin Medical Quarterly Journal,' Feb., 1860), I shall not enter into them here, except in reference to one which, both from its power and its universal employment, should be better understood; viz: tea. We do not take tea without other food, except it be after the principal meal of the day, when the system is still replete with food; that is to say, we do not take it at a period when the blood is usually alkaline, but when it abounds in free acids. Its action is rapid, and so powerful that a maximum increase of one-fourth or one-fifth of the whole quantity of carbonic acid exhaled is obtained in less than half an hour; and it has so accumulative an action, that twenty-five grains taken every quarter of an hour, gave an excess of two hundred grains of carbonic acid within about one hour— a quantity of carbon much greater than it contained. Hence it has a most powerful indirect influence in promoting oxygenation, and is especially fitted for the condition in which there is a disposition to excess of free acid. I am desirous to press this upon your attention; for I believe that, in such cases, tea is our best and most certain medicine. I have also found it of great value in cases of night perspiration, when a large breakfast-cup is taken cold in the night—of greater value far than any other remedy, except the removal of too much bedding, or warmth, or damp. The detection of the exudation of the blood, in which there is an excess of free alkali, is rather by negative than positive indications; but when there is wasting, langour, defective appetite and assimilation, soft and perspiring skin, and no excess of acid in the urine or perspiration, we have the indications of its existence. This is a condition which prevails in hot weather and climate, and one on which the administration of phosphoric as well as the vegetable acids is of great avail. Fat is commonly less indicated, and such remedies as tea may be injurious by increasing the waste. Cold bathing with salt water is of great value in both classes of cases, but especially the latter; and the preparations of iron in cases of anæmia are then also much more indicated, since the excess of alkali promotes their solution, and permits a larger amount to be collected and retained in the blood. Milk is a food which I advise to be taken at frequent intervals of the day, and especially in the early morning, and is in a degree applicable to both these states of the blood; since, while it has a free alkali and albumen on the one hand, it has fat and phosphates on the other. I believe, however, that skimmed milk, or milk made sour, is much more fitted than new milk for cases in which there is no excess of acid; and it will be found to be better borne by the patients. Milk has a direct action, by supplying plastic and heat-forming materials; and an indirect one by its casein, in promoting assimilation. I also take the opportunity of saying that we have been too much led away from the use of milk and cream in supplying fat to the system, by the habit of administering separated oils; and I think it is easily capable of proof that the combination of the oil in a molecular state with the other components of the milk renders it far more assimilable than any separated fat can be, and especially a fat administered alone; that is, apart from the nitrogenous substances which I have proved to be necessary for its assimilation.

From the point of view in which I have been accustomed to regard phthisis for some years, I have considered that voluntary deep inspirations were well fitted as adjuncts to treatment; and this, both because with greater amount of air inspired even voluntarily there is an increase in the chemical changes which follow, and because with a lessened degree of distention and vital action proceeding in the air-cells there must be a progressive tendency to the degradation of their structure, and, as I believe, to the filling up of their cavities by epithelium, or the earliest state of tubercle in these organs. The advantage of this method has for advocates no less authority than Lehmann, who, on physiological grounds, commends it in cases of deficient respiration, in bronchitis; and Piorry, who has recently affirmed, as may be seen by an extract in the Medical Times of January 5th, 1859, that by this means he has been able to cause a large amount of expansion in cases where *deposits* even had heretofore prevented it. Dr. Muhry, a German writer, who has recently treated of climate, seasons, and elevation, over the degrees of expansion of the lungs, has supported the view that expansion of the air-cells is a desideratum of great importance. Hence, in addition to my own affirmation that in numerous cases of early phthisis I have been able to increase the existing diminished vital capacity of the lungs, I think there is evidence to convince the minds of those who regarded my plan with distrust, that there is good reason for its adoption, and that it is not too mechanical to be excluded from physiological and even pathological emylyment. The increase in the function of the lungs, and the prevention of that tendency to deficient expansion of the air-cells, both alike tend to prevent the further deposition of tubercle; and if, from various reasons, they should fail, the present unsatisfactory result of all kinds of treatment leaves us nothing to regret. I cannot but attach great importance to both of these objects; viz, the increase in the vital actions of the vesicles, and their due expansion and expansibility; and both, in fact, are accomplished in our ordinary directions for violent exercise for the maintenance of health.

I cannot avoid the expression of my conviction that in many cases, owing to the deficiency of vital action, whilst the appetite for food is not materially lessened, the system becomes overburdened with ill-digested material, tending to the accumulation of carbon in the blood, and materially impeding the respiratory process. In such cases, diminution of food, with increase in the action of the liver and bowels, do very much to relieve the oppression of the breathing, and to aid in the work of increasing the expansibility of the air-vesicles. In such cases, alcohols are directly contraindicated; and, indeed, in almost all cases of phthisis (excepting, perhaps, those in which the depressed action of the heart is a marked feature), the advantage of the employment of alcohols is apart from, and in spite of, the alcohol.—*Braithwaite's Retrospect*, from *British Med. Journal*, Dec. 3, 1859, *p.* 982.

NERVE FORCE.—Is nerve force a polar force?—is there any manifestation of current force in nerves during action?—are questions proposed for consideration by Mr. H. F. Baxter, in the *Edinburgh Philosophical Journal*, where he has published an account of his experiments, in which he employed—1. The galvanometer; 2. The galvanoscopic frog; and 3. A magnetised needle. He deduces the following conclusions: That nerve force *during* nerve action is not *current* force; that the electric condition of the nerve, as manifested by the nerve current, is not *converted* during nerve action into current force; that the electric condition of the nerve may be merely a condition for nerve action, perhaps a necessary condition; that the evidence is in favor of nerve force being polar; and that it is of a higher character than any other polar force, and that the conversion of electric force into nerve force *during* nerve action may be regarded as an open question.—*Med. Times and Gazette.*

WEB OF THE SPIDER A REMEDY FOR FEVER.—In the Indian *Lancet* for April 1, is a communication from Dr. Donaldson, recommending the web of the common spider as an unfailing remedy for certain fevers. It is stated to be invaluable at times when quinine and other anti-periodics fail in effect or quantity, not only from its efficacy, but because it can be obtained anywhere without trouble and without cost. This remedy, it was observed, was used a century back by the poor in the fens of Linconshire, and by Sir James M'Gregor in the West Indies. The Doctor now uses cobweb pills in all his worst cases, and is stated to have said that he has never, since he tried them, lost a patient from fever.—*Ibid.* from *Notes and Queries.*

"The History of Iodine," says Dr. Forget, "is very remarkable. First introduced as an anti-goitre remedy, it was long before it got any credit in scrofula. For some years it has had a tremendous run. In its new phasis it began by curing hydrocele; then a bold hand introduced it in hydrarthrosis; then it passed into ascites, then into hydrothorax, into the pericardium, and I believe it has penetrated even into hydrocephalus. This is not all; it cures ovarian cysts, chronic abscesses, fistula, caries of the bones; it disinfects, deterges, and cicatrises wounds of a bad kind; it cures diphtheritis, dysentery, etc., etc. Ah! here is a remedy which men call specific!"—*Ibid.*

The following are Bernard's conclusions from his experiments upon the Submaxillary Glands, (*Medical Times and Gazette.*.):—"You must have been convinced by these experiments, that the submaxillary gland enjoys a double nervous system—that two distinct sets of nerves preside over its physiological functions; those derived from the facial increase the abundance and diminish the viscosity of the secretion, while those which spring from the ganglionic system act precisely in the opposite direction. These results had already been, in some measure, made known to you during the protracted study we devoted to the motor nerve of the parotid gland.

The influence which the ganglionic system exercises over the submaxillary gland explains the power enjoyed over this secretion by various causes of excitement acting upon distant parts of the alimentary canal; thus, for instance, the direct introduction of food into the stomach generally stimulates the flow of saliva from the submaxillary glands —a fact easily ascertained in animals provided with an artificial opening into the gastric cavity."

The Surgical Treatment for Short Sight.—Mr. J. Vose Solomon has been making an interesting series of experiments at the Birmington Eye Infirmary, to ascertain the effect of dividing the muscle of the lens by an incision *transverse* to the direction of the fibres, in persons who are short-sighted (myopic). He finds that such an incision so far weakens the power of the muscle to draw the lens forwards, that the focal range becomes double for both distant and near objects. The cases he has operated upon have varied in age from twelve to forty-five years. The cornea of some of the eyes has not been remarkably arched; in none was it conical; in some it was very prominent; and the globe large. Mr. Solomon generally selects either the highest or the lowest part of the corneo-sclerotic union for the entrance of the cataract-knife, which he pushes with the *flat* of the blade directed *upwards*, through the pillars of the iris and the ciliary muscle, there cutting the fibres across to the extent of two, or two-and-a-half lines. In this operation the incision does not radiate from the lens and the ciliary attachment of the iris, as it does in Mr. Hancock's operation for acute glaucoma; hence, the diameter of the globe immediately behind the diaphragm is not increased.—*Med. Times and Gazette.*

Dr. Parke, an American physician who served in the Russian Hospitals during the Crimean war, in speaking of the treatment of gangrene in sores and stumps, says:

"I cannot speak too highly of creasote in this disease. I have seen gangrenous stumps looking perfectly healthy in forty-eight hours, and sometimes in twenty-four, after the application of creasote in the following manner. Where the gangrene had affected the stump to the extent of half-an-inch or less, I have taken a swab and applied the pure creasote all over the diseased parts, and in the irregular cavities, and then covered the parts with a cloth smeared over with a liniment, composed of 1 drachm creosote to Oj of oil. As I said, frequently in twenty-four hours, the whole gangrenous mass would come off on the removal of the dressing. The protruding bone was never cut off, but left until it became partially absorbed within the healthy granular mass, when it was taken hold of with forceps, twisted off, and extracted. The time necessary for its absorption generally amounted to several weeks after the stump had taken on a healthy action. In conclusion, let me say, our patients had a good diet, being served with plenty of soup, good fresh meat, rye and buckwheat bread (which they preferred) and occasionally good light wheat bread, *vodka* (rye whiskey) twice a-day, and sometimes wine."—*American Journal of Med. Sciences*, for April.

OLD NEW YORK PHYSICIANS.—A recent number of *The Historical Magazine*, a monthly which would interest every one of our readers, says:

A letter, with several details of biographical interest, addressed by Dr. W. W. Buchanan, a physician of Greenock, to a gentleman of this city, was recently placed in our hands as a curious note of the past. Dr. Buchanan is a native of America, having, as will appear by his note, enjoyed the honor of being a godson of Washington. He has long lived abroad. His letter contains several references to the physicians of New York, of the last generation, which seemed to be well worthy of elucidation. We have, accordingly, called upon a valued contributor to the *Historical Magazine* to assist in our inquiries, and the result is the courteous and interesting reply which we now—with the references which called it forth—lay before our readers.

Extract from Dr. Buchanan's Letter.

OLD NEW YORK PHYSICIANS:—All my old fellow-laborers, Anthon, Moore, Post, Tillary, are gone—even the youngest of my school-fellows (Irving) has gone before me, but I think I can refer you to my old friend John Allan, Vandewater-street. Drs. Francis and Mott must also recollect me, and probably Thomas Suffern may not have entirely forgotten me. In all human probability I am the only individual living that can boast of being a *godson* of Washington. I was baptized in his arms at Hanover (Morristown), N. J., on the 4th June, 1777, with Kosciusko on one side and Lafayette on the other, and still enjoy a good green age—living life over again amid the blandishments and caresses of a lively set of grandchildren. I remain, gentlemen, very truly yours,

W. W. BUCHANAN, M. D.

BAGATELLE (Greenock), Jan. 13, 1860.

LETTER OF DR. FRANCIS.

To the Editor of the Historical Magazine.

March 2, 1860.

DEAR SIR:—With your kind request of last evening, I cheerfully comply. Walter W. Buchanan must be still well remembered by some of our oldest practitioners. I hold him most distinctly in my mind's eye, both bodily and mentally. He was of Scotch origin, and graduated M. D. at the University of Glasgow, at the beginning of the present century. He was Secretary to the County Medical Society of New York in 1808, succeeding to that trust his predecessor Dr. Archibald Bruce, the first Secretary after the organization of the institution by State legislation in 1806. Dr. B., upon the resignation of Dr. John R. B. Rodgers, was chosen by the trustees of Columbia College, in 1808, Professor of Obstetrics, which appointment he held some four or five years. I was present and listened to his introductory lecture upon opening the first course. He seemed to me not to possess the elements of longevity in his physical structure, but he has outlived nearly all his contemporaries, both young and old—doubtless owing to his cautious and prudent ethics and his rigid sanitary principles.

In reference to his fellow-laborers, Dr. Authon (Charles Christian) died in this city in 1815, aged 81 years. He was a native of Germany, received his diploma at Amsterdam, and was some time in the service of the Dutch West India Company. He was appointed Garrison Surgeon at New York by Lord Amherst, and transferred to Detroit and appointed Surgeon-General at that post. He continued at Detroit during the French and Indian wars. At the close of the revolutionary struggle he turned his attention to New York, and arrived in this city in 1784, where he continued in the practical exercise of his profession to the termination of his valuable, honorable, and patriotic life. He enjoys an enduring renown as the father of the great linguist and professor of Columbia College, Charles Anthon, the present Jay Professor of Languages. Of Dr. Moore, I need only say he long enriched practical medicine in this city by his devotion and skill He was a brother of the late Bishop of the diocese of the Episcopal Church of New York, and it would be difficult to determine in which of these two brothers the greater excellences of purity of life and professional worth abounded—in the doctor, William, or in the Bishop, Benjamin. Dr. Moore's ample obstetric practice enabled him to publish some valuable statistical tables on Natural and Instrumental Labors. He doubtless furnished Buchanan (his intimate friend) with practical hints on the subject, the better to stamp value on his lectures. Dr. Moore died in New York in 1824, aged 71 years. Dr. Post (Wright) is still recollected among us. He was for forty years pre-eminently distinguished as a physician and surgeon, and for a long period noted as the accomplished Professor of Anatomy in Columbia College, and in the College of Physicians and Surgeons in this city during its most triumphant career. He was for thirty-five years one of the surgeons of the New York Hospital. He was a great exemplar of professional dignity. He died at Throgsneck in 1820, aged 62 years. Of Dr. Tillary it deserves to be stated, that for a period of full forty years he practiced the medical art in New York htiw acknowledged reputation. He was a native of Scotland, and came out to this country as a surgeon's mate at the commencement of hostilities between the colonies andthe mother country. He was of a generous nature, kind to the poor and the afflicted—braved the yellow fever pestilence, more particularly during its violent rages in 1795 and 1798 in this city—aided Bayley in his investigation into the nature of the disease in 1795—was an early President of the County Medical Society, and was long a popular President of the Saint Andrew's Society. He died in 1818, in this city, aged about 67 years. He had a cultivated taste for literature, and not unfrequently upon the presentation of his medical bill accompanied it with a poetic epistle to his restored patient. He was inoculated with the poetry of Burns, almost amounting to a disease. Of the recently departed and lamented Washington Irving I am confident I shall be excused from saying any thing at present. Of the good, kindly, and venerable Mr. John Allen, so signally known for his devotion to antiquarian research and American historical records, I have only to add that time has not abated his zeal in the accumulation and preservation of materials to elucidate the transactions of this great city, and its march in improvements. Still a resident of old Vandewater-street, his generous pursuits daily enlarge the stock of useful knowledge for bibliographical and biographical research. What is universally known need hardly to be stated in this brief notice. The surgeon of the age, Professor Valentine Mott, still practices his great art with the zeal and success of his earlier days; and having, according to Sir Astley Cooper's opinion, performed more heroic and greater operations than any other surgeon, he may be assured that chirurgical science will not fail of its duty in recording the man who laid the foundation in this metropolis of clinical instruction in the great art, and enlarged the boundaries of the profession by his original surgical achievements. The threescore and ten years of his laborious life have only enkindled new appliances and strengthened solicitude for the further promotion of chirurgical dexterity and sanative results. Mr. Thomas Suffern, the opulent merchant, still dwells with the triumphant corps of successful men in the responsible toils of commerce. Both he and Dr. Mott retain strong recollections of Dr. Buchanan. You will thus see that Dr. Buchanan's associates were of a high order.

This letter will testify that the man who so circumstantially affirms the fact of his being a godson of Washington is not obliterated from my memory, either as teacher or practitioner.

With due consideration of esteem, I subscribe myself a well wisher to your valuable work. John W. Francis.

Injection of Acetate of Morphia into the Cellular Tissue of the Arm, in Delirium Tremens. By W. Ogle, M. A., M. D.

Cantab.—June 8, nine A. M.—A. B., aged 30, a cotton-spinner, who has had considerable anxiety from unremitting attention to his business, and who has, according to his own confession, been in the habit of taking more (beer and spirit) than has been good for him, came up to town yesterday morning under an impression, partly erroneous, that urgent business required his presence in London. He is in fear of an attack of delirium tremens, and applies for advice in the hope that it may be averted. I encourage him to think that it may be so. He is now, though in much agitation, sufficiently himself to tell me that he had recently (two months ago) an attack; that he was delirous from Thursday to Monday, and that the treatment adopted was opium and brandy. His brother thinks it doubtful whether he ever thoroughly recovered before he took to drinking again; but to what extent it is not easy to determine. He is evidently subject to mental depression, thinks himself, and persuades his friends that he is very weak; and as he derives temporary relief from brandy, he resorts to this as his remedy. He thinks that if he were to go to America, so as to be free from business, and to be beyond the reach of the telegraph, he would recover himself, and be able to break off his habit, which at the present time he is most anxious to do. He is in bed; his skin is moist and warm; pulse 100, full, intermits occasionally; face flushed. His eyes are suffused; looks wild; one would not be surprised at anything strange that he might do if he were left to himself. He brought his razor to his brother, lest he should injure himself; but his brother thinks that he makes more of his fear than he need do. He had no sleep last night. He does not dream, but when he wakes he is not refreshed; opiates make him dream. Tongue woolly down the center; bowels open this morning. There is some tenderness of the abdomen, but I cannot localise it very precisely. He has been retching, but without any decided result. Urine rather turbid, not high-colored; but it is mixed with whatever he may have brought up from his stomach. He had two glasses of brandy at five A. M. To be kept perfectly quiet; to bathe his head with cold water; to have no more spirit at present; to take an aperient powder, also a mixture containing nitric ether and acetate of ammonia every four hours.

Two P. M.—I did not intend to have visited him again till this evening; but he became very fidgety and sent for me. I find him very busy bathing his head as the cold is very grateful; but his teeth are chattering, as if he was in ague, his hands are blue, and his pulse almost imperceptible. (I did not observe till later on, that the left pulse, owing to divergence of the main branch of the artery, is about a fourth weaker than the right; as, however, he was out of bed, it is probable that it was the right pulse that I felt on this occasion; when he was in bed it was more convenient to feel the left pulse.) On lying down, his pulse at once becomes stronger; so I do not give him any spirit, but only m xx. of chlorodyne in a dose of the mixture. The bowels have not been moved. He wishes to take a black draught, but there is every probability that the powder will be sufficient.

Seven P. M.—Skin moist, warm; pulse 64, not full; the bowels have been open twice, and he has been very sick, says it is the medicine that made him so. He seems rather inclined to sleep. I give him chlorodyne half-drachm, and leave instructions to repeat the dose in four hours time if necessary.

June 9, half-past seven A. M.—He seems more comfortable. He slept a short time after the first dose, and again after the second, but vomited after both; and says that he brought up some blood. The bowels have acted twice. Pulse sixty-eight, intermits occasionally. Urine scanty, high-colored. To take a mixture with quina gr. j, twice daily.

Seven P. M.—Was quiet till noon, so that his brother left him—but on his return at five o'clock, he found him talking of cobwebs and that the ceiling was falling, etc. Pulse (probably the left) sixty or a few more, very feeble; when he sits up it is more frequent and intermits much. He says he is quite comfortable; either does not wish to tell me, or as I rather think, he does not remember his hallucinations two hours ago. Beyond a little hesitation in his manner there is nothing worth notice. I think it, however, prudent to see him again this evening, ere I decided on the amount of opiate that will be required.

Half-past ten, P. M.—He is more himself, tells me the same story as those who have been with him, viz. that he has thought a shadow on the wardrobe was a lion, has felt as if the ceiling were falling upon him. I leave two half-drachm doses of chlorodyne with the nurse, one to be taken immediately, the other after an interval of four hours.

June 10, half-past five A. M.—The nurse sent for me, as he had something like a fit, turned cold and pale. He tells me he has slept comfortably, but on cross questioning admits that he can remember very little of what has transpired during the night. The nurse says he has had no sleep, has been out of bed two or three times not knowing what he did. Pulse is about 100, is 136 when he sits up, and is more feeble. The conjunctivae are injected, and the pupils are, as they have been hitherto, dilated. Tongue dark, venous in color, not so woolly as yesterday. Skin, warm. Has passed about an ounce of urine, not more. I remain with him two hours, trying to compose him with chloroform, for the nurse says that the chlorodyne seemed to excite rather than soothe him. I administer the chloroform on my handkerchief; the composing effect is very transient; as soon as ever I try to press it, he becomes excited, and says he will have no more, so I give him half a drachm of chlorodyne in an ounce of brandy, and leave twenty minims to be taken at noon. His pulse (probably the right) during the inhalation of the chloroform, became more slow and steady. Sponging his forehead and behind his ears quiets him more than anything.

Three P. M.—Pulse (probably the left) 112 feeble. Is tolerably himself now, but does not remember my morning visit. Has been sick twice after the medicine; but his pupils are slightly contracted. His appetite is not amiss.

Ten P. M.—He is perspiring profusely, probably from the resistence to the attendants. It requires two men to hold him. His pupils are as dilated as ever; he is talking about business matters incessantly. I give chloroform another trial (for two hours). Once only he passed beyond the stage of excitement, but at the same time his breathing stopped and he became rather dark in the face, so I was afraid to push it; his pulse also varied very much. I therefore inject into the cellular tissue of the arm solution of morphia m. vj. (gr. j. according to Hunter's recipe). He is quiet almost immediately, so far as to lie still without being held, but he continues talking. After waiting an hour I resolve to inject another dose, but the pulse being feeble I give an ounce of brandy in soda-water, and while I am preparing my syringe in the next room, I have the gratification to hear him snore. Breathing sixteen in the minute, quite regular. Pulse 120, full; intermits occasionally. The pupils are only the size of a large pin head.

11th, ten, A. M.—Nurse reports that he ceased to snore soon after I left, when he turned over on to his side, and that he slept comfortably for five hours. On waking he did not know where he was, but was soon reassured, asked for soda-water, and turned to sleep again. He wakes up as I enter the room, if he was not awake before; says he has had refreshing sleep, and that he is pretty well; but he looks toward the door in an expectant, half-frightened way; and when he dozes, which he is quite ready to do, his hands are at work feeling as if for something which he cannot find. His pupils are slightly contracted, about as much as yesterday at three P. M. Pulse intermits when he is asleep, not otherwise, I think; it is not so full nor so frequent; it is quicker and weaker when he sits up. He has not passed water since the last note; the bladder is not much distended; he says that he cannot usually make water readily, except when at stool. He asks for, and is allowed, a couple of eggs for breakfast.

14th.—Circumstances made it desirable that he should be at home as soon as possible. I gave permission, on the condition that he abstain from business for a fortnight at least; and go with his family to the sea-side; and not touch wine, beer, or spirits, except his medical attendant order it for him.

Remarks.—Some surprise may reasonably be felt, both that I did not give stimulants more freely, and that I did not persevere with the chlorodyne. I think it quite possible that, if the chlorodyne had been given in water instead of with the nitric ether and acetate of ammonia, it would not have made him sick; and it was the idea that the opiate made him sick which made me press it. Also, the apparent advantage of the brandy after the injection of the solution of morphia, makes it probable that more brandy might have been given with advantage. On the other hand, the small amount of stimulus that was given made it much more easy for me to insist upon a total abstinence when he was convalescent; and the marked benefit of treatment by injection into the cellular tissue is the more striking, in that a single grain was successful when chloroform had failed, and that it was used at a time when the effect of an opiate that had been administered had entirely passed away. It is but justice to add, that it was owing to the papers of Mr. Hunter which have appeared in the *Medical Times aad Gazette* that I was led to try this mode of administering morphia in delirium tremens.—*Med. Times and Gaz.*

Mr. WEEDEN COOKE, in a paper read before the Harveian Society of London, on the communicability of syphilis, said (*Med. Times and Gazette*):

“That it was singular how many questions respecting syphilis remained unsettled, considering the number who suffered from the disease, and the length of time it had been known and studied. Even the primary symptoms still give rise to controversy. Some declare the hard chancre only infectious; others that the soft chancre does not infect the constitution, but may produce a hard chancre which does infect; while others denominate the soft chancre a chancroid ulcer which is not syphilitic at all. A fourth party considers both these chancres syphilitic, and therefore capable of producing constitutional symptoms. As a consequence of differences of opinion there is much diversity of treatment, which is a practical evil. Respecting the communicability of secondary symptoms there is much yet to be cleared up. It is a recognised fact that secondary syphilis is conveyed through the father to the fœtus in utero, and from the fœtus to the mother. Mr. Cooke had verified this fact in numerous instances. He related the case of a lady who had two syphilitic children without herself being affected, but upon the birth of a third she exhibited all the signs of a severe constitutional attack. Although this mode of communication had been long recognized, it has until recently been denied that secondary symptoms ever were communicated from one person to another. It is well kown, however, that M. Ricord, the staunch supporter of non-communicability, has been obliged to modify his opinions, owing to the production of incontestible evidence that the discharge from secondary ulcers did produce eruptions and ulcers of a similar character; while the French authorities, convinced of the possibility of this infection, not long since prosecuted two medical men for inoculating two children suffering from favus with the matter of secondary syphilitic disease. Mr. Henry Lee also has recently brought before the profession instances which favor the conclusion that the constitutional disease can be conveyed from one person to another. Mr. Cooke then related the particulars of a boy who had recently been under his care at the Royal Free Hospital exhibiting indubitible evidence of this occurrence. A fine boy, seven years of age, was covered with an eruption which could not be mistaken for anything but psoriasis syphilitica. He had also enlargement of the occipital glands, the throat was injected, and recently, from being a very healthy boy, he had become cachectic. He was ordered two grains of grey powder twice a-day, and got quite well in less than three weeks. His mother, who brought him was herself afflicted with the same eruption. She had also ulcers on the inside of the lips and cheeks, and had suffered much from rheumatism. Her husband had given her primary syphilis one year before. After being "cured" of this, secondary syphilis appeared, and she was treated and got well. She remained well until about six weeks ago, and had since that time been affected as stated. The boy slept with his mother, and she was of course in the habit of kissing him. A month after the re-appearance of the disease in the mother the son became affected. This case Mr. Cooke considered conclusive of the possibility of communicating secondary syphilis. It was no doubt a very rare occurrence, because the discharge from a secondary ulcer would be very rarely applied to a raw surface capable of absorbing it, but when so applied it evidently had the power of infecting a previously healthy person, and it was most desirable that this fact should be known and recognised.

On the Difficulties and Advantages of Catheterism of the Air-Passages of the Chest. By HORACE GREEN, M. D., LL. D., etc.

(Read before the Medico-Chirurgical College, Dec. 22, 1859.)

The writer discusses the following questions:

1. Can the operation of catheterism of the air-passages be performed with certainty and facility?
2. What are the difficulties and dangers of the operation?
3. What advantages are to be derived from this method of treatment?

The first has long been settled affirmatively. But Dr. Green adds:

"Notwithstanding this operation is being daily performed at the present time, yet it is not always accomplished with certainty and facility. Nature has so guarded the opening into ærien passages that catheterism of the bronchi is an operation that will be found difficult to accomplish. In many cases, I am confident, the tube passes over the glottic aperture, and enters the œsophagus, even when the operator feels quite certain that it has been introduced into the larynx. In my own practice I have found myself deceived, not unfrequently, especially in the first years of my experience in this mode of treatment. At first I believed the instrument to have taken the rigth course, but afterwards ascertained, in many instances, that it had entered the œsophagus."

In regard to the second, he says:

"The *epiglottis* does not of itself close entirely the aperture of the glottis. This cartilage being placed between the entrance of the larynx and base of the tongue, is pressed downward by the abasement of the latter, in the act of deglutition, and being moulded upon, only partially closes the glottis. It is not, therefore, correct to state, as many anatomists do, that the epiglottis "closes completely, of itself the opening of the larynx," in deglutition.

The arytenoid muscles are the especial *constrictors* of the glottis. These muscles as (Longet has demonstrated) receive filaments from the recurrent nerve. Covering the lips of the glottis is a narrow zone of exquisitely sensitive mucous membrane, which receives its nervous filaments from the internal branch of the superior laryngeal nerve. These two nerves, the one supplying the constrictors, and the other this strip of mucous membrane, communicate freely with each other, but they have no connection whatever with the epiglottis. The irritation of this body, therefore, will have no effect upon either the motive or sentient nerves peculiar to the larynx. This is important to remember, namely: that the epiglottis, in its normal state, is an organ nearly insensible; but when the least irritation of that sensitive portion of the mucous membrane which covers the supra-glottic space occurs, this irritation is quickly communicated to the constrictor muscles, through filaments of the recurrent and laryngeal nerves, and the aperture of the glottis is as quickly shut up. When it is desirable, therefore, to medicate the aerien passages in disease of these parts, it is necessary, as all are aware, to educate the glottic aperture, by repeated cauterizations of this opening. For if, under ordinary circumstances, the attempt be made to pass the sound, or probang, into the larynx before the exquisitely normal sensitiveness of this point of membrane be partially subdued, it will probably prove abortive; or, if successful, and the instrument be made to pass the supra-glottic guard, a violent spasmodic action, not only of the constrictors, but all the other muscles of the larynx, will occur, followed, often, by great irritation of the parts, and a suffocative cough; and if, under these circumstances the operator persist in finishing the operation, by injecting a solution of the nitrate of silver into the bronchi, the irritation and cough are both greatly increased, and in some instances inflammation of the bronchial and pulmonary tissue have been awakened, apparently by these combine disturbing causes.

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Spasms of the glottis will, as I have before stated, occasionally occur, caused by the irritation of the supra-glottic space, in the introduction of the tube, although great pains may have been taken to prepare the parts by previous training. In this case, I at first attributed the spasm and subsequent cough and dyspnœa to irritation, produced at the glottic opening.—But from some observations and experiments which I have since made, I am fully satisfied that the disturbance in this instance, and probably in the case mentioned by Dr. Bennett, as well as others, similarly affected, was caused by the employment, at first, of a solution of too great strength."

In regard to the third question he says:

"This method of treatment, in this class of diseases, has been continued more or less, since the report to which I have referred was made; and such has been the amount of success which has continued to attend this plan of treatment up to the present time, I am now ready to affirm, after an experience of many years, in a field of observation unusually large, that, *if I was required to relinquish all other known therapeutic measurss or topical medication in the treatment of throacic diseases, I should choose the latter, with hygienic means alone, in preference to the entire class of remedies ordinarily employed in the treatment of these diseases.*

In chronic bronchitis, in asthma, and in early tuberculosis, cauterszation of the air-passages has been found to be a most valuable and efficient remedy. As I have stated, topical medication, in the treatment of throacic diseases, has been continued in my hands since the publication of the "Report of the One Hundred and Six Cases" to which reference has been made. During this period of three or four years, large numbers of patients, affected with chronic laryngeal and bronchial diseases, with asthma, and with tubercular phthisis, have been treated, and the success which has continued to attend this practice has served to increase greatly my confidence in this measure, as a therapeutic agent. I shall, however, omit a detail of any of these cases coming under my own observation, and only refer briefly to the opinion of other physicians on the value of this mode of treatment."

And he concludes the paper with the following directions, quoting in part from a letter he addressed to Prof. Bennett, and published by the latter in his Clinical Lectures on Medicine:

"I would, with pleasure, send you the instruments I employ, but they are simple, and may be obtained at any surgical instrument maker's shop. They consist of an ordinary flexible, or gum catheter, and a small silver, or glass syringe. The catheter is Hutchings' gum-elastic catheter, (No. 11 or 12) which is 12½ inches in length; and, as the distance from the incisor to the tracheal bifurcation is, ordinarily, in the adult, about eight inches; if this instrument is introduced so as to leave only two inches ot the catheter projecting from the mouth, its lower extremity must, of course, (if it enter the trachea) reach into one or the other of its divisions. I first prepare my patients by making applications, with the spong probang, and nitrate of silver solution, for a period of one or two weeks, to the opening of the glottis and larynx, until the sensibility of the parts is greatly diminished. Then, having the tube slightly bent, I dip the instrument in cold water, (which serves to stiffen it for a moment, and obviates the necessity of using a wire,) and with the patient's head thrown well back, and the tongue well depressed, I place the bent extremity of the instrument on the laryngeal face of the epiglottis, and gliding it quickly through the rima glottidis, carry it down to, or below, the bifurcation, as the case may require. It is necessary that the patient continue to respire, and the instrument is most readily passed during the act of inspiration. The tube being introduced, the point of the syringe is inserted into its opening, and the solution injected. This latter part of the operation must be done as quickly as possible, or a spasm of the glottis is likely to occur. Indeed, if the natural sensibility of the aperture of the glottis is not well subdued by previous applications of the nitrate of silver solution, or if the tube, in its introduction, touches roughly the border or lips of the glottis, a spasm of the glottis is certain to follow, which will arrest the further progress of the operation. The epiglottis, which is nearly insensible, (and this you may prove on any person, by thrusting two fingers over the base of the tongue, and touching, or even scratching with the nail, this cartilage,) should be our guide in performing the operation. The strength of the solution for injecting, is from 10 to 25 grains to the ounce of water. Commencing with 10 or 15 grains to the ounce, its strength is subsequently increased, and the amount I now employ is from ½ to 1½ drachms of this solution.*

Allow me further to add, that, latterly in commencing the injections, I have used a solution still weaker than above denoted. When my patients are prepared for catheterism, by repeated cauterizations of the opening of the glottis and larynx, to reduce the normal sensitiveness of the parts, the tube is then introduced, and a drachm of solution of nitrate of argent. of the strength of from 5 to 10 grains to the ounce of water, is injected through the trachea. Afterwards, the solution may be gradually increased in power; but, at the present day, I seldom employ the remedy, in bronchial injections, of a strength above 20 grains of the salt to an ounce of water.

Should a spasm of the glottis occur, as I have before remarked in this paper, on the insertion of the tube into the larynx, the instrument should be promptly withdrawn, and no further attempt be made to proceed with the operation, until the irritation has fully subsided. It is necessary that the applications of the sponge-probang be continued in the intervals of the employment of the tube.

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* "Clinical Lectures on Medicine," pp. 608-9.

In cases of bronchitis, in asthma, and in early phthisis pulmonalis, even, the use of injections into the bronchi, once or twice a week, operate to diminish the cough, expectoration and dyspnœa, with great certainty, and very many cases of these diseases have recovered under local treatment, after other measures had failed."

Book Notices.

Dr. Wells, the Discoverer of Anæsthesia. New York.

The widow of the late Dr. Horace Wells has published a pamphlet of fifteen pages, which shows very clearly "who conquered pain." For ourselves, we have never had much doubt about the matter. If there is any faith to be placed in human testimony, to Dr. Wells belongs the honor of the discovery of Anæsthesia. And this, we think, is the judgment of the profession generally.

Dental Anomalies, and their Influence upon the Production of Diseases of the Maxillary Bones. By AM. FORGET, M. D., C. L. D., etc. Translated from the French. Philadelphia: Jones & White, 1860.

This memoir, crowned by the Academy of Sciences, of the French capital, in March, 1859, is one of very considerable interest. It is intended to show the anatomical and physiological causes that predispose the jaws to organic lesions requiring the intervention of art — to put the surgeon on the track of anomalies in the nutrition and position of the teeth, so as to enable him to prevent the pathological consequences, and, in the case of a tumor, to restrict the surgical operation to the diseased parts, preserving the continuity of bone.

Cassell's Illustrated Family Bible. New York: Cassell, Petter, & Galpin.

Mr. John Cassell, a well-known and highly esteemed London publisher, has established a house in New York for the sale of his "Illustrated Family Bible." The work will be issued on the first and fifteenth of each month, and will be completed in about fifty parts; the price of each part, fifteen cents. The text is accompanied with notes, mostly from recent commentators, and embodying the results of modern travel in oriental regions; and there are numerous wood engravings (thirty-two in the part before us), some of them copies of celebrated paintings, and others illustrative of natural history, antiquities, geography, etc., all executed in the very best style. This bible has met with an immense circulation in England, and it deserves to have a large one in this country.

Mr. Cassell also publishes, in parts, a popular *Natural History*, to be completed in four volumes. Every part will consist of thirty two pages, with a beautiful full-page engraving printed on tinted paper.

The Masonic Review. Vol. XXIII, No. II. Published monthly, by Cornelius Moore, Cincinnati, Ohio.

It is hardly necessary to commend a journal which has sustained itself for ten or twelve years. The literature of Masonry has undergone a marked improvement within the period named, and the Review has done its share in effecting this. We hope to greet Bro. Moore, monthly, at least, for a long time to come.

We may say here that one of the first operations on the upper jaw ever seen by us was for what proved to be a cyst, containing a beautifully formed tooth (a canine, if we remember rightly), of full size. The tooth had grown into the jaw, rather than out of it, the crown looking upwards instead of downwards.

The memoir is well and profusely illustrated; it is published at the office of the *Dental Cosmos.*

LOUISVILLE

Medical Journal.

JULY, 1860.

REVIEWS.

Art I.—*A Practical Treatise on Fractures and Dislocations.* By Frank Hastings Hamilton, M. D., Professor of Surgery in the University of Buffalo; Surgeon to the Buffalo Hospital of the Sisters of Charity, etc. Illustrated with two hundred and eighty-nine woodcuts. Philadelphia: Blanchard & Lea. 1860. p. 757.

We have awaited this treatise with rather more than the usual interest. The communications made from time to time, by Dr. Hamilton, to societies and to the profession at large on the subject of fractures, led us to anticipate that a treatise from his pen would be one of great value. The laudatory notices of the published volume, in journals foreign and domestic, increased our desire for a perusal of it. We watched day after day for the appearance of the book in our book-stores; but, at length, tired of the delays of these, we ordered a copy from the publishers direct.

Having now read much of the treatise, having, indeed, studied it attentively, we are prepared to say that it is, save in one respect, an admirable production, one that reflects honor on the profession of this country. It is as complete, too, as it is excellent; it embraces the whole matter of fractures and dislocations.

That our readers may, in some degree, judge of the quality of the book for themselves, we propose to notice it briefly.

Chap. I, treats of the "*General Divisions of Fractures.*" In this, fractures are divided into complete, incomplete, comminuted, compound, complicated, serrated, and impacted, with the usual sub-divisions, oblique, transverse, and longitudinal.

Chap. II, treats of the "*General Etiology of Fractures.*"

Chap. III, relates to "*General Semeiology and Diagnosis.*" The most important signs of fracture, in the opinion of Dr. Hamilton, are, 1st. crepitus, 2d, mobility of the fragments upon each other, and 3d, the re-appearance of the deformity when the setting or reducing force is abandoned; he refers, of course, to the diagnosis of unimpacted, non-serrated, and complete fractures. These phenomena are treated of somewhat in detail. In regard to crepitus, the attention of the reader is drawn to the fact, that this sign of fracture, so conclusive in its testimony when plainly announced, may be indistinctly perceptible, or altogether absent, in the following conditions:

> "First; we cannot, in a pretty large proportion of cases, bring the broken ends again into apposition. Whatever mere theorists may say to the contrary, and notwithstanding surgeons up to this time have rarely ventured to allude to this subject, the fact is so that we do not usually "set" broken bones. We do not, even at the first, bring them into complete apposition, unless it is as the exception. I speak of bones once completely displaced by overlapping, and these constitute the majority of examples which come under the surgeon's observation. Second; in transverse fractures of the patella, and in fractures of the olecranon and coronoid process of the ulna, of the coracoid and acromion process of the scapula, and in all similar detachments of processes and apophyses, the action of the muscles by displacing the fragments prevents crepitus from being readily produced. Third; in a few cases, such as certain fractures of the neck of the femur, of the neck and head of the humerus, etc., the broken ends are impacted, or so driven into each other as to forbid the production of motion and crepitus; or they may be simply denticulated, and the consequences, so far as crepitus is concerned, will be the same."

To this we think he might have added stellated fractures of the scapula through the glenoid cavity, fractures of the lower end of the fibula, etc., etc. In truth we incline to the opinion that the question of fracture must, in most cases, be determined by other proof than that afforded by crepitus.

We do not place as high an estimate on preternatural mobility, as an available diagnostic, as Dr. Hamilton does. True, when it is present it is, like crepitus, conclusive. It may be, and doubtless is, present in the cases which he indicates. But the determination of "preternatural mobility" or "false point of motion," we take it, is, in the majority of fractures, simply impracticable. When we get out of the range of these few fractures, viz: of the shaft of the femur, of the shafts of the tibia and fibula together, of the shaft of the humerus, and of the shaft of the radius and of the ulna, the fact of preternatural mobility is of doubtful value, since it is difficult of determination. So in regard to it as a sign of fracture, viewed in reference to the whole class of fractures, we doubt if it is to be regarded as one of the dominating diagnostics. We heartily assent to the commanding and almost universal value of the third and last symptom, viz: the re-appearance of deformity when once extension or any other process of reposition of the fragments has been abandoned. But here the author must speak for himself:

"As to the third common sign mentioned, namely, that in the case of fractures the bones do not generally support themselves, but demand for this purpose the interposition of splints, bandages, and even of extending and counter-extending forces, its authority rests upon the same evidence as does the assertion already made that bones once separated entirely, cannot generally be "set," that is, placed again end to end in such a manner as to be made effectually to support each other. It rests upon the evidence of my own personal experience; to which I am permitted to add, also, the personal experience of Malgaigne, who with a frankness which does him great credit, and which, I am sorry to say, has hitherto found few imitators, remarks: 'Second. That overlapping is the most stubborn of all. Here I will add a disagreeable truth, which classical authors have kept too much out of sight, namely, that it is so stubborn that in an immense majority of cases the efforts of art are unable to overcome it.' And it must be observed further, that if we shall often find it possible to bring the broken surfaces sufficiently into contact to develope crepitus, they may still be unable to maintain themselves in this position, owing to the obliquity of the line of fracture."

We regret that the author has passed, almost without mention, that sign of fracture which has always been to us the very first and oftentimes the most convincing, namely, the general appearance of the injured limb, including, with especial emphasis, the deformity and the attitude of the member. We venture the assertion that Dr. Hamilton himself, if questioned upon this point, would tell us that in many, if not, indeed, in the majority of the fractures which he has seen, even of the long bones and in their very shafts, too, he gained his first, and to his mind conclusive, evidence of fracture by the simple expression of the limb; that he had often, at a single glance, been able to tell thus to his own satisfaction that the leg or the arm was broken, even when crepitus and preternatural mobility were not demonstrable, and ere yet the last of his grand diagnostics had been put to the test. Are not eversion of the foot, of the toes, the flattening of the shoulder, the position of the forearm, so many silent yet swift witnesses of the appropriate fractures? Nay, more; are we not often compelled to try the issue between dislocation and fracture by the nature of the deformity, amongst other things?—the deformity being, on the side of the fracture, almost the only available testimony. There is an expression of utter helplessness in the attitude of a broken femur, an expression at once touching and instructive; further, the whole attitude of the patient is oftentimes expressive of the nature of the injury. Says Erichsen, speaking of fracture of the clavicle:

> "The attitude of the patient is remarkable; he sits, leaning his head down to the affected side, so as to relax the muscles, and supports his elbow and forearm in the sound hand, in order to take off the weight of the limb."

We regret that Dr. Hamilton did not see fit to mention these things in this chapter. We regret it all the more because his book is to be a book of reference and study for many years to come; and any imperfection in a book of this sort is more to be deplored than in a whole library-full of the sort of works with which medicine is flooded nowadays—books which few people buy, and fewer read when they have bought them. To our minds, "general considerations," like those treated of in the present chapter, are of great importance to the clear elucidation of the subject; they seem to fix the attention of the student, to compress his thoughts into certain channels, as well as to present the whole subject in a condensed, brief, and emphatic form.

There is another point to which we would draw attention. It is in reference to the author's teaching of the method of union in fracture of the patella, the olecranon, et id omne genus.

> "The only satisfactory reason which, as we think, can be assigned for the absence of callus in these cases, is found in the doctrines we now advocate; that is to say, it is usually absent because that amount of excitement and irritation is usually absent which alone determines its formation. In the case of the olecranon, patella, etc., the fragments being separated from each other by muscular action, so that no painful pinchings or chafings occur, and their rough surfaces or sharp points being rather drawn away from than protruding into the flesh, no sufficient provocation exists for the production of inflammation and effusion. Hence the failure of provisional callus, but wherever the fracture occurs, and however moderate the action, definitive callus does not fail; still the broken surfaces of the patella and olecranon are softened, and smoothed, and covered over with a new matter, which, if contact could have been secured and preserved, would certainly have

served to consolidate and repair the breach. The natural reparative process proceeds, but only the accidental process is omitted. This latter, however, is seen again even here, when from other and unusual causes a sur-excitement is established."

Now waiving all objection to the distinction here made between provisional and definitive callus, a distinction which it seems to us has no foundation in reason or nature—waiving, also, all objection to the idea that inflammation is in any way necessary to the healing of fractures—it seems to us that the doctrine here propounded, if objectionable on no other ground, is objectionable on this, that in its projection into practice it would lead to the institution of a practice needless at best, and positively harmful in most circumstances, if we can place any reliance upon the known effects of motion of one fragment upon the other. If the kind of attrition referred to above is necessary to the formation of definitive callus, or, rather, if by the absence of attrition in fracture of the patella and olecranon the definitive callus is not formed, how does it happen that this callus is formed in fracture of the tibia when the parts are kept rigidly at rest? A higher or lower degree of inflammation may contribute a greater or less amount of plastic material for the purposes of repair, but the plasturgic force, by which the material is in any case organized and moulded into the similitude of normal tissues, is a function exercised by adjoining tissues. Would it not comport better with what is known of the laws governing the ultimate development of connective structures, to suppose that the cicatrix substance lying between fragments widely separate is obedient to the universal law in such matters, and is developed into the similitude of that with which it lies in contact? to say, that so much of the plasma as covers the broken surface of the fragment, and is within the range of the plasturgic forces of bone, is developed into bone, while that too far distant to feel this force is developed into the similitude of the fibrous tissue with which it lies in contact—when other and more complex tissues, as muscular, are in immediate contact, that it has such development as accords with the known developmental power of such complex tissues? Such an explanation, if it had no other excellence, would have this, at least, that it could lead to no pernicious practice.

Chap. V, is on the "*General Treatment of Fractures.*" Dr. Hamilton draws attention to three indications: replacing the fragments; maintaining them in place and at rest; and controlling inflamation, spasm, &c. For the first he directs immediate reduction, whenever this is at all practicable. For the second, he condemns the carved wooden splints hawked about the country, justly, no doubt in regard to most of them. He says:

> "They deceive especially the inexperienced surgeon into the belief that he has in the splint itself a provision for all these wants, and consequently lead him to neglect those useful precautions which he would otherwise have adopted."

In addition to wooden splints, to which he gives the decided preference, he mentions felt, such as may be had by cutting an old hat into strips, or broadcloth, saturated with gum shellac, and dried. The material thus prepared may be softened by dipping it in boiling water; it is thus made ready for being moulded to the broken limb. Of splints made of gutta percha sheeting, he says:

> "There is scarcely any fracture demanding the use of a splint in which I have not demonstrated its utility, but it is especially valuable, as I shall have occasion to mention again, as an interdental splint in fractures of the jaw, and as a moulding tablet in all fractures occurring in the vicinity of joints."

Straw splints are thus described:

> "Reeds, the coarse, rank grass which grows in swamps, flags, willow branches, and unbroken wheat straw, may be quilted between two thicknesses of cloth in the same manner, and form very excellent temporary splints. I have especially found it convenient to use wheat straw in

the form of junks. Gathering up a bundle of unbroken straws of the size of my arm, I roll them snugly in a broad piece of cotton cloth, cut off the projecting ends and then stitch up the cloth neatly. We have thus a splint of considerable firmness, and one which is cool and especially adapted to the summer, allowing the perspiration to evaporate freely."

Dr. Hamilton, we think, does scant justice to bandages. The special advocates of the bandage hereabouts, use it for the purpose of preventing muscular action, as well as all swelling of the limb, whether by hæmorrhage or inflamatory effusion. They claim for it that it almost uniformly attains the object, too. They also claim that the accidents attributed to the bandage, used according to the Dudleyan directions, are in all justice attributable rather to the unskilfulness of the applier. There is doubtless force, and justice, too, in the exception thus taken to Dr. Hamilton's rulling; for it is unquestionable that in many cases all swelling of the limb is preventible by the judicious use of the bandage. Per contra, however, it must be admitted that, inasmuch as there are but few experts in the use of the bandage, and that the proper use of it requires considerable practice and skill, in actual service the measure is not as productive of good as it is capable of good—and that it often, in unskillful hands, does produce the lamentable effects attributed to it.

Chap. VI, treats of "*Delayed Union and the non-union of bones.*" The only novel point in the chapter is that which speaks of local scurvy, produced by the exclusion of light and air from the limb, as retarding or promoting the union of the fragments.

The treatment for non-union is summed up thus:

"Finally, having thus brought rapidly before us all of the various modes of treatment which have been suggested and practised for non-union of broken bones, we are prepared to affirm the following conclusions, or summary of what we believe ought to be the general course of procedure in these cases:

First. Improve the condition of the general system.

Second. Remove as far as possible the local impediments, such as a separation of the fragments, local paralysis, local scurvy resulting from long exclusion from light and air, congestions, etc.

Third. Increase the action of the tissues immediately adjacent to the fracture, upon which tissues rather than upon the bone, as Malgaigne thinks, the formation of callus depends. A theory which, as applied to old and ununited fractures, we are not prepared to deny. This may be accomplished by frictions, and violent flexions of the limb at the seat of fracture; possibly in some measure by the application of vesicants or of other stimulants, to the skin itself.

Fourth. Employ again compression and rest for a period of from two to four or eight weeks.

Fifth. Resort to the practice recommended by Brainard, namely, perforation of the soft parts and bone with an awl.

Sixth. If in the lower extremity, allow the patient to walk about, after the plan of White or Smith.

Seventh. If the fracture is not in the femur, and as an extreme measure, employ the seton.

Eight. Resection is applicable only to superficial bones, and in cases of overlapping.

Where these measures have failed, after a fair trial, we should either abandon the case as hopeless, only supporting the limb by such apparatus as may be found most serviceable, or we should recommend amputation."

Chap. VII, relates to "*Bending, partial fractures, and fissures of the long bones.*" Our author believes, and indeed he has shown by the recorded results of experiments, that bending of bones without immediate straightening very rarely takes place without partial fracture. He also shows that, in partial fracture with bending, the bone rapidly or slowly regains its form in most instances, and that moderate pressure is the limit of the surgeon's duty.

Chap. XII, treats of "*Fracture of the Lower Jaw.*" Dr. Hamilton admires the use of a gutta percha splint on some of the fractures of this bone, and these are the directions for the use of the material:

"The mode of preparing gutta percha, and of adapting it between the teeth, is as follows: Dip a couple of pieces of the gum of a proper size, into boiling water, and when they are sufficiently softened, mould them into wedge-shaped blocks, and having wrapped each block with a piece of cotton cloth, carry them to their appropriate places between the back teeth; immediately press up each horizontal ramus of the jaw until the mouth is sufficiently closed, and the line of the inferior margin is straight; in this position retain the fragments a few minutes, until the gum has sufficiently hardened. Meantime, it will be practicable, generally, to introduce the fingers into the mouth, and to press the gutta percha laterally on each side towards the teeth, and thus to make its position more secure. When it is sufficiently hardened, remove the splints for the purpose of determining more precisely that they are properly shaped and fitted."

He advises, in addition, the use of a modification of the common four-tailed bandage.

CHAP. XX, treats of "*Fractures of the Humerus.*" The following concise statement of signs pertaining to the diagnosis of injuries about the shoulder joint, is so valuable and comprehensive, that we quote the whole of it:

"a. *Signs of a Dislocation.* (*Cause*, generally fall upon the elbow or hand.)

1. Preternatural immobility.
2. Absence of crepitus.
3. When the bone is brought to its place it will remain without the employment of force.

These three are common signs, which apply to any other joint as well as the shoulder.

4. Inability to place the hand upon the opposite shoulder, or to have it placed there by an assistant, while at the same time the elbow touches the breast. This is a sign common to all of the dislocations of the shoulder.*

The following are special signs, or such as belong only to particular dislocations of the shoulder.

5. Depression under the acromion process; always greatest underneath the outer extremity, but more or less in

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*Report on a New Principle of Diagonsis in Dislocations of the Shoulder-joint, by L. A. Dugas, Prof. of Surgery in the Medical College of Georgia. Trans. Amer. Med. Assoc. vol. x, p. 175.

front or behind, according as the dislocation may be into the axilla, forwards or backwards.

6. Round, smooth head of the bone felt in its new situation, and very probably removed from its socket; moving with the shaft. Absence of the head of the bone from the socket.

7. Elbow carried outwards, and in certain cases forwards or backwards, and not easily pressed to the side of the body.

8. Arm shortened in the dislocation forwards, and slightly lengthened when in the axilla.

b. *Signs of a Fracture of the Neck of the Scapula.* (*Cause*, generally a direct blow.)

1. Preternatural mobility.

2. Crepitus, generally detected by placing the finger on the coracoid process and the opposite hand upon the back of the scapula, while the head of the humerus is pushed outwards and rotated.

3. When reduced it will not remain in place.

4. The hand may generally, but with difficulty, be placed upon the opposite shoulder.

5. Depression under the acromion process, but not so marked as in dislocation.

6. Head of the bone may be felt in the axilla, but less distinctly than in dislocation. Never much forwards or backwards. Head of the bone moves with the shaft. Head of the bone not to be felt under the acromion process, although it has not left its socket.

7. Elbow carried a little outwards, but not so much as in dislocation. Easily brought against the side of the body.

8. Arm lengthened.

0. The coracoid process carried a little toward the sternum, and downwards.

10. Pressing upon the coracoid process it is found to be movable, and it is also observed that it obeys the motions of the arm.

c. *Signs of Fracture of the Anatomical Neck of the Humerus.* (*Cause*, a direct blow; generally opening to the joint, but not always.)

1. Mobility not increased, nor diminished.

2. Crepitus, generally discovered by pressing up the head of the bone into its socket and rotating; or, when

the tubercles are also broken, by grasping the tubercles and rotating the arm.

3. Fragments not generally displaced.

4. The hand can be placed easily upon the opposite shoulder.

5. Very slight, if any, depression under the acromion process.

6. Head of the bone generally in its socket, but not felt so distinctly as before the fracture.

7. Elbow falls easily against the side of the body, or is easily placed there.

8. Arm not lengthened, nor appreciably shortened, unless the head be driven so much into the body as to seperate the tubercles.

9. In this latter case there are present also the signs of fracture of the tubercles.

d. *Signs of Fracture of the Humerus through the Tubercles. Extra Capsular.* (*Cause*, direct blows.)

1. Generally, there is neither marked mobility nor immobility, except what immobility may be due to a contusion of the muscles.

2. Crepitus discovered, but not so easily as in intra-capsular fractures, by rotating the arm while the tubercles are grasped firmly.

3. If displacement exists, the fragments are not always easily kept in place when once reduced.

4. The hand can be placed upon the opposite shoulder.

5. No depression under the acromion process.

6. Head of the bone in its socket, and moving with the shaft, when, as is usually the case, it is impacted.

7. Elbow hangs against the side of the body.

8. Arm shortened when impacted, but not very appreciably.

The signs which characterize this accident are more obscure than in either of the other shoulder accidents. They are mostly negative, and will not generally be determined positively except in the autopsy.

e. *Signs of a Longitudinal Fracture of the Head and Neck, or splitting off of the Greater Tubercle.* (*Cause*,direct blow upon the front of the shoulder.)

1. Mobility of the limb natural.

2. Crepitus; elicited especially by grasping the tubercles and rotating the arm, or by carrying it up and back and then rotating.

3. When reduced, the fragments will not remain in place.

4. The hand can be placed upon the opposite shoulder.

5. Some depression under the acromion process.

6. A smooth bony projection directly underneath the coracoid process, or close up its inner or outer side, moving with the shaft. The head of the bone cannot be felt in the socket, yet the space under the acromion is not entirely unoccupied.

7. Generally, but not always, the elbow hangs against the side. Sometimes it inclines a little backward. It can always be easily brought to the side.

8. Arm generally neither lengthened nor shortened.

9. A remarkable increase in the antero-posterior diameter of the upper end of the bone.

10. A deep vertical sulcus between the tubercles, corresponding with the upper part of the bicipital groove.

f. *Signs of a Fracture through the Surgical Neck.* (*Cause*, direct blows.)

1. Preternatural mobility often, but not constantly present.

2. Crepitus, produced easily when there is no impaction, or when the displacement is not complete, but with difficulty when impaction exists or the displacement is complete.

3. When once the fragments have been displaced, it is exceedingly difficult ever afterward to maintain them in place.

4. If the fragments remain in place, the hand can be easily placed upon the opposite sholder. When completely overlapped it is difficult.

5. A slight depression below the acromion, not immediately underneath its extremity, but an inch or more below.

6. Head of the bone in the socket, and moving with the shaft when impacted, but not moving with the shaft when not impacted. The upper end of the lower fragment being often felt distinctly pressing upwards toward the coracoid process; its broken extremity being easily distinguished by its irregularity from the head of the bone.

7. Elbow hanging against the side when the fragments are not displaced, but away fom the side when displacement exists.

8. Length of arm unchanged unless the fragments are impacted or overlapped: or both fragments are much tilted

inwards. If the fragments are completely displaced, the arm is shortened.

g. *Signs of a Separation at the Epiphysis.* (*Cause*, direct blows.)

1. Preternatural mobility.

2. Feeble creptius; less rough than the crepitus produced when broken bones are rubbed against each other.

3. Fragments replaced are not easily maintained in place.

4. Same as in preceding variety of fracture.

5. The depression is not immediately under the acromion, yet higher than in most fractures of the surgical neck, perhaps three-quarters of an inch below the acromion process.

6. Head of the bone in its socket, and not moving with the shaft. Upper end of lower fragment projecting in front, when displacement exists, and feeling less sharp and angular than in case of a broken bone; indeed, being slightly convex and rather smooth, it may easily be mistaken for the head of the bone.

7. Same as in preceding variety.

8. Length of arm not changed unless the fragments are overlapped, or both fragments are tilted upon each other. When the fragments are overlapped, the arm is shortened.

9. This accident is almost peculiar to infancy and childhood. It seldom occurs after the fifteenth year.

The treatment, too, may be of intrest to the reader:

The fragments having been reduced as completely as possible, a broad and firm gutta-percha splint should be moulded to the outside of the arm and shoulder. When it has become sufficiently hard and firm, it may be secured in place by a roller carried from the elbow to the axilla. If the splint covers well the top of the shoulder, and is sufficiently wide, it is not apt to become displaced; and by resting against the point of the acromion process, it enables the upper turns of the bandage to draw the broken end of the lower fragment outwards; at least, as effectually as any other dressing is capable of doing, and renders an axillary pad unnecessary. The sling may then be applied as recommended by Sir Astley Cooper, or the arm may be premitted to hang perpendicularly beside the body.

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As a substitute for gutta percha, a firm sheet of felt may be employed, or a carved wooden splint, or the very complete shoulder and arm splint of Welch, but in either case the upper portion of the splint ought always to rest upon the shoulder, so as to prevent its sliding downwards.

These extracts will enable the reader to form some estimate not so much of the total value of the treatise of Dr. Hamilton as of the mode in which Dr. H. handles his subject. We have no time for futher analysis or additional quotations. It would be difficult to give the reader material for a full appreciation of the volume, without quoting it almost entire, as matter for commendation meets us on almost every page of the chapters relating to individual fracturse and dislocations. In these chapters will be found a complete history of all the known varieties and complications of the injuries in question; whilst the symptoms are fully stated, and their significance ably discussed. All the known and valuable methods of treatment, all the different kinds of apparatus in use, are fairly described and appreciated. Dr. Hamilton, whilst paying due respect to the opinions of others, to the apparatus and treatment which they may have advised, nevertheless everywhere and on all occasions speaks his own sentiments modestly but firmly, leaving no doubt as to these, and as to the kind of apparatus which he prefers. He writes like one perfectly familiar with his subject, from the study of it in books and at the bedside; he has evidently read and observed in a catholic spirit, with the single purpose to discover that which is right, and true, and just. An earnest manly spirit pervades the book. The book is a good one moreover in this, that it is in the main sound in its doctrine, courteous in its bearing, firm in its convictions and in the expression of its opinions, just to and appreciative of its compeers, honest in its execution and its purposes, and that it well nigh exhausts the subject of which it treats. It is not the book of genius, but of talent and of learning. These excellencies pertain, however, to the matter of the treatise, not to the manner. Dr.

H. seems to have forgotten that there is a science of words as well as of bones, an art of composition as well as one of bandaging. Certainly, the Chairman of the Association's "Committee on Medical Literature" ought to have done better in this regard than he has done here, and he ought to do it yet. In any future editions of the book, (and we hope that some will be called for right speedily), let Dr. H. revise a little closer—enough so, at least, to get rid of positive inaccuracies. He need not be too proud to do so.

The Institutes of Medicine. By MARTYN PAINE, A. M., M. D., L. L. D., Professor of the Institute of Medicine and Materia Medica, in the University of the City of New York, etc., Fifth Editon: New York, Harper & Brothers, 1859.

The fifth edition of this well known work has just been issued in a handsome volume of over a thousand pages from the press of Harper & Brothers. We cheerfully recommend the "Institutes" of Prof. Paine to the consideration of such of our medical brethren as are not already possessed of the volume. Although the author holds opinions different from many, and we might say, indeed, from the majority of medical men of the present day, yet by an attentive persual of the book, it will be seen that he ably sustains his positions, if he does not in every instance convince us that they are entirely correct.

Prof. P. treats the subjects under discussion with decided ability, and we think with great fairness, not only vindicating his own positions, but combatting the opposing theories of others. A few brief extracts from the chapter of *Preliminary Remarks*, will suffice to show that the author writes like a true philosopher:

2, *c*. Neverthless, each of the four great departments of medicine possesses so many peculiar characters, that they may be severally considered as constituting, to a large extent, distinct parts of one great symmetrical whole (§ 83, *c*). Pathological could never have been inferred, *a priori*, from any extent of physiological inquiries, nor could the effects of therapeutical agents, or the natural termination of disease in health or in death, from any knowledge of anatomy, physiology, or pathology. The whole is originally the work of observation; and we come to learn the relations of the four great branches of medicine by comparing the phenomena which are presented under the various conditions of health and disease, and as these phenomena may be affected by artificial influences.

† † † † † † † † †

2, *c*, To the eye of the philosopher, therefore, Nature, in her organic department, as in every other, appears in an aspect of astonishing simplicity, when he contrasts her forces and laws with the diversity of their phenomena; nor does he confound the principles and laws which distinguish the different departments of nature. To every other eye the phenomena of life appear confused, and seem referable to no common powers or laws. But he who has obtained the key to the true philosophy of life, by a wide observation of nature, lays open at once the apparent secret of all its results, whether in health or disease. Whatever he sees has its individuality, and stands in relief from all the rest. He knows at a glance, from whence this or that springs, how it is related to others, and he traces the whole directly up to a few simple principles.

† † † † † † † † †

And yet it is one of the pretended improvements of the day to insist upon nothing but facts, and to denounce all principles in medicine; as if the Almighty had not ordained principles and laws as well as facts, which are mere emanations from the former.

The reflecting physician must at once feel the force of the last quotation. The doctrines of the early fathers in medicine, were mere theories unsustained by well ascertained facts, whilst many writers of the present day attempt to maintain their positions by facts which bear to them no relation whatever. Indeed, it is in this way that Homœopathy and every other false system is sought to be sustained before thd public. A Homœopath, for example, may prescribe for a hundred patients, and ninety-five of the hundred may get well; he will then triumphantly claim that his remedies have relieved the ninety-five cases which have recovered. But suppose we look at the matter a little closer, and after careful experiment find that just the same per cent. of similar cases will get well without any remedies at all; and upon still further investigation, that the doses given by the Homœopath have no sensible effect upon the system in either health or disease; do we not come to the inevitable conclusion that the facts in the case and the supposed sequences have no connection whatever?

A single quotation will be enough to show that the author is decidedly opposed to the *chemical theory* of Liebig and others, which attributes all physiological phenomena to chemical action.

5. Chemical and mechanical philosophy, as we have already seen, are strangers to the philosophy of medicine. There is a natural conflict between the subjects of each. They have no relationship, no sympathies, but carry on a perpetual hostility. The organic being is forever converting to its own uses the inorganic, and changing its very nature into its own. The inorganic is fruitless in resistance and in assault, till the former is passive. It then lays waste the fabric by which it had been wrought into a great system of designs, and degrades the whole to its own level. Chemistry, therefore, begins where physology ends; and physiology begins with organic influences upon the elements of matter, or where chemistry leaves off. No department of medicine has anything to hope from chemistry beyond its power of analysis (§ 1029, 1030).

This point is labored at length in the work, and with that earnistness and ability which forcibly reminds us of Prof. Charles Caldwell's interesting lectures upon the same subject, which we listened to twenty years ago. And we are prepared to admit, too, that the position assumed by the author is, in our humble judgment, fully sustained. For while we do not deny that chemical action may take place in the organic being, we contend that such action is only subservient to *vital action* by which every organism is governed, and that the vital principle, locked up in and constituting an essential part of every animal and vegitable, is not an attribute of inorganic matter.

But as we wish merely to *notice* and not *review* this valuable work we desist from further comments upon it.

Abstracts and Selections.

Proceedings of the American Medical Association—Thirteenth Annual Meeting.,

First Day.

The delegates to the Association met in the Chapel of Yale College, at New Haven, Tuesday morning, June 5th, and at 11 o'clock the Association was called to order, the President, Dr. Henry Miller, of Kentucky, in the chair.

Prof. Fisher, of Yale College, opened the Convention with prayer.

Dr. Jonathan Knight, the Chairman of the committee of Reception, welcomed the members of the Association to New Haven.

Dr. Charles Hooker, the Chairman of the Committee of Arrangements, also welcomed the delegates.

The roll was then called, nearly 300 delegates answering to their names.

The sections were then assigned their rooms, by Dr. Hooker.

All physicians and surgeons of the Army or Navy present, were, on motion of Dr. John Atlee, invited to take seats upon the floor of the Convention.

A report from the Committee on Parliamentary rules was, after some discussion, laid upon the table.

Upon motion, a recess of ten minutes was had, to allow each State to choose its member for the Nominating Committee. Upon reassembling, the Committee on Nominations was declared; after which, the Association adjourned.

AFTERNOON SESSION.

The Association met at 3 o'clock, Vice-President H. F. Askew, of Del., in the chair.

Dr. Charles Hooker introduced Gov. Buckingham and Lt. Gov. Catlin to the Association.

The Secy., Dr. Bemiss, of Ky., then gave the names of the Committee on Credentials.

The retiring President, Dr. Henry Miller, then gave his address, which we are obliged to omit for want of space.

The Nominating Committee reported the names of officers for the Convention for the ensuing year, as follows:

President—Eli Ives, Conn.

Vice-Presidents—Wilson Jewell, Pa.; A. B. Palmer, Mich.; Joseph P. Logan, Ga.; J. N. McDowell, Mo.

Treasurer—Caspar Wistar, Pa.

Several invitations to visit prominent public places and factories of the city were read, and times set apart for such visits.

Motions were made of acceptance of the invitations etc.

Motion made to suspend business and receive the officers just elected.

President Dr. Ives then appeared, attended by the escort appointed by the Association, and was cordially received by the members. He then made a very short address, of which the following is nearly a verbatim report:

"All he had, all he was, he owed to his profession. He loved it. He had two sons in the profession, also a grandson; and he, like a very distinguished physician of the present century, could say he would visit the sick as long as he could go, and when he was unable, he would be carried to the bedside."

He was followed by first Vice-President, Dr. Wilson Jewell, who on account of the age of the President elect, it was agreed upon should preside over the deliberations of the Convention.

Dr. Davis of Illinois,' offered a series of resolutions referring to the specific business of morning and afternoon sessions, as follows:

Resolved, That the general meetings of the Association after this day, shall be restricted to the morning sessions, and the afternoon sessions, commencing at 3 o'clock,shall be devoted to the hearing of papers and discussions in the several sections.

Resolved, That each section shall choose its own officers, and make its own rules of order.

The first and second resolutions were adopted; the third after much discussion, was laid upon the table, with the proviso that the mover should have an opportunity to revise it, and, at his own time, bring it again before the Association.

Dr. Little, of California, on motion of Dr. Timothy Childs, and seconded by Dr. D. S. Conant, was invited to a seat on the floor of the Convention, there being no delegate from California.

A Committee on Voluntary Communications was then appointed, viz: Drs. E. D. Force, of Kentucky; T. W. Blatchford, of New York; N. S. Davis, of Illinois; R. LaRoche, of Pennsylvania; Rochester, of New York.

At his own request, Dr. LaRoche was excused from serving on this committee.

Dr. Ruschenberger, of Pennsylvania was appointed in his stead.

The report of the Treasurer was then called for, read and adopted, then referred to committe on Publication.

The Committee on Publication then reported. Report accepted.

Committee on Prize Essays was then called on to report, but failed to do so through absence. Adjourned.

SECOND DAY—WEDNESDAY.

The Convention was called to order by the 1st Vice-President, Dr. Wilson Jewell, of Pennsylvania.

The President announced that the subscription list for the publications of the Sydenham Society was on the Secretary's table.

An opportunity was now given for delegates to name physicians from States not represented, and from the Army and Navy, as members by invitation.

Dr. Gardiner moved that the rules of order be suspended for Dr. Logan, of Georgia, to tender his resignation as Vice-President. Resignation accepted.

Committee on Education reported—Dr. Reese, Chairman. He particularly dwelt on the necesssities in preliminary education—-Practical Anatomy, Pathology and Clinical Medicine. He ably supported his arguments in favor of lengthened terms of study, with a less number of lectures per day—four being the maximum.

Dr. Brodie moved that the report and the resolutions connected with it be received and referred to the Committee on Publication. Received.

On motion, the report was received. The Association, on motion of Dr. McDowell, of Missouri, resolved itself into a Committee on the Whole, Dr. A. S. Acker in the chair, and proceeded to the discussion of the Resolutions.

A motion was then made that the Committe rise, report progress, and ask leave to sit again, which was carried.

The Committee on nominations reported that the Convention will meet at Chicago on the 1st Tuesday in June, 1861. Amendment offered that it be changed to the 1st Tuesday in May.

Dr. Davis of Ill., spoke for the Illinois delegation, urging June as the proper month—furthermore he welcomed the Convention to the hospitalities of the citizens of Chicago.

Motion was made to change the time to the 2d Tuesday of June; unconstitutional.

The whole list of officers was not reported yesterday. The Committee on nominations here concluded their report as follows:

In place of 3d *Vice-Preesident*, Dr. Logan, of Georgia, resigned, Dr. R. D. Arnold, of Georgia.

Secretarys—S. G. Hubbard, Ct., H. A Johnson, Ill.

Committe of Arrangements—N. S. Davis, G. W. Freer, DeLaskie Miller, E. Andrews, H. W. Jones, Thomas Bevan, J. Bloodgood, all of Illinois.

Prize Essays—Daniel Brainard, Ill., D. L. McGuigin, Iowa; M. L. Seaton, Mo.; John Evans, Ill.; A. S. McArthur, Illinois.

Committee on Publication—S. G. Smith, Penn.; Caspar Wistar, Penn.; S. G. Hubbard, Conn.; R. J. Breckenridge, Ky.; Ed Hartshorne, Penn.; H. F. Askew, Del.

Report of Committee on Prize Essays was called for—Prof. Worthington Hooker, of Connecticut, Chairman. Three Essays had been handed in—two of which had considerable merit and showed much research. The Committee had concluded not to award any prizes this year. Report accepted.

Moved a suspension of the rules, to give Dr. Wilbur, of New York, an opportunity to report the protest of Dr. Ignatius Langer, of Iowa, against the action of the Committee of Arrangements in not accepting his credentials as a delegate. The President stated that he held in his hand a letter stating that Dr. Langer had been expelled from the Scott County Medical Society of Iowa, and therefore the rules of the Society would not permit his acceptance as a delegate here.

Motion to suspend lost, almost unanimously.

Reports of Special Committees were then called for, and disposed of as follows:

Morbus Coxarius and Surgical Pathology of Articular Inflamation—Lewis A. Sayre, N. Y.; referred to the section on Surgery.

Surgical Treatment of Strictures of the Urethra—James Bryan, Penn., reported progress and asked for longer time; referred to its proper section.

Drainage and Sewerage of Large Cities, their Influence on Public Health—A. J. Semmes, Cornelius Boyle, G. M. Dove, D. C., reported progress and asked for longer time.

Puerperal Tetanus; its Statistics, Pathology and Treatment—D. L. McGugin, of Iowa; report the same as above.

Hospital Epidemics—R. K. Smith, Penn.; laid over.

Puerperal Fever—S. N. Green, Indiana, do.

Anæmia and Chlorosis—H. P. Ayres, Indiana; reported progress, and asked to continue the Committe, to report next year.

Veratrum Viride—J. B. McCaw, Virginia, laid over.

Alcohol; its Therapeutical Effects—J. W. Dunbar, Md.; asked for a change in its title, making it read, "Alcohol in its relations to man,"—granted. Report next year.

Meteorology—J. G. Westmoreland, of Georgia, laid over.

Milk Sickness—Robert Thompson, Ohio; partial report made—accepted and referred to section of Practical Medicine.

Manifestations of Disease of Nervous Centres—C. B. Chapman, Wisconsin; laid over.

Microscopic Observations on Cancer Cells—George N. Norris, Ala. Chairman asked to resign; committee discharged.

Philosophy of Practical Medicine—James Graham, Ohio, laid over.

On some of the Pecularities of the North Pacific and their Relations to Climate—William H. Doughty, Georgia, absent.

On the Microscope—John C. Dalton, Jr., N. Y., David Hutchinson, Ind., A. Y. Stout, Cal., Calvin Ellis, Mass., Christopher Johnston, Md.; report next year.

Dr. Dalton, Chairman of this Committee, tendered his resignation by letter; accepted, and the committe discharged.

Diseases and mortality of Boarding Schools—C. P. Mattingly, Ky., Dixi Crosby, N. H.,—reported progress; referred to its proper section.

On various Surgical Operations on Defective Vision—M. A. Pallen, Mo., T. J. Cogley, Ind., W. Hunt, Penn.; laid over.

On the Blood Corpuscle—W. Sager, Michigan; referred to proper section, with additional time.

American Medical Necrology—C. C. Cox, Md. Report was ordered to be read before the Convention, Thursday; amended to have Dr. Cox retained as Chairman and report next year.

Effects of the Virus of the Rattlesnake, when introduced into the System of Mammalia—A. S. Payne, Va.; reported progress and was discharged.

Constitutional origin of Local Diseases, and the Local Origin of Constitutional Diseases—W. H. McKee, N. C., C. F. Haywood, N. Y.; laid over.

Subcutaneous Injections as Remedials—I. Langer, Iowa. not allowed to report, not being an accepted delegate.

Quarantine—D. D. Clark, Pa., E. M. Snow, R. I., W. Jewell, Pa., E. D. Fenner, La., I. W. Houck, Md.; asked to be continued. Agreed to.

Medical Ethics—B. F. Schenck, Pa., Chairman, resigned and asked that Dr. Paul F. Eve, of Tenn., be substituted; agreed to. Report next year.

Tracheotomy in Membranous Croup—A. V. Dougherty, N. J. Partial report; this was accepted, and referred to the Surgical Section. Further time allowed to make out the report.

Effect of Perineal Operations for Urinary Calculi upon Procreation in the male—J. S. White, Tenn. Letter from Dr. White read; laid over.

Mercural Fumigation in Syphilis—D. W. Yandell, Ky., laid over.

Cause and Increase of Crime—W. S. Snead, Ky.,; asked to be continued. Agreed to.

Education of Imbecile and Idotic Children—H. P. Ayers, Indiana. Report offered; referred to the proper Section.

Report of Committee on Medical Literature, referred to Committee on Publication; accepted without reading.

Pons Varolii—Partial report. The Committee wished to be continued; agreed to. Referred to the Section on Anatomy.

Afternoon Session.

The Convention was called to order by the Chairman at 3 o'clock.

According to the resolution carried the day previous, the Convention adjourned to the various Sections.

Third Day—Thursday.

The Convention was called to order at 3 o'clock—the President, Eli Ives, M. D., of Conn., in the chair,

Dr. Shattuck moved a suspension of the rules for the purpose of introducing two resolution; carried.

Dr. Bowditch reported the following resolutions on the Hunter memorial to be erected in Westminister Abbey; accepted.

Resolved, That it be recommended to the different States to collect subscriptions of not more than one dollar each, from every regularly educated physician. All moneys so collected to be forwarded by the Chairman of the Committe here, by appointment, to the Treasurer of the Hunter memorial in London.

Resolved, That Drs. Henry Bowditch, of Mass., Amos Nourse, of Maine, G. B. Twitchell, of N. H., C. Clark, of Vermont, G. L. Collins, of R. I., Chas. Hooker, of Conn., and many others, be a committee to collect subscriptions.

Resolutions adopted as a whole.

Moved that a copy of these resolutions be sent to all the regular Medical colleges in the country; carried.

Report of the committee appointed to confer with the American Medical Teachers' Convention. The resolutions were discussed at some length by Drs. Flint of N. Y., Shattuck of Mass., McDowell of Mo., Atlee of Penn., Brodie, of Mich., Palmer, of Mich., and Morse of Maine.

The report was adopted and referred to committee on Publication.

Committee on Nominations reported—

Committee on Medical Literature:

Frank H. Hamilton, New York; Edward Warren Md.; Charles A. Lee, New York; W. C. Ely, R. I.; E. H. Clarke, Mass.

Committee on Medical Education—

L. S. Sayres, Va.; C. C. Cox, Md.,; I. C. Bradbury, Me.; L. H. Steiner, Md.; M. A. Pallen, Missouri.

Surgical Treatment of stricture of the Urethra—James Bryan, Pa.

Drainage and Sewerage of Large Cities—A. I. Semmes, La.; C. Boyle, Ga.; G. M. Dove, D. C.

Puerperal Tetanus; Statistics, Pathology and Treatment—D. L. McGuigin, Iowa.

Anæmia and Chlorosis—H. P. Ayer, Ind.

Alcohol and its Relations to Man—W. Dunbar, Md.

Milk Sicknes—Robert Thompson, Ohio; S. M. Bemiss, Ky.

On the Effect of Perineal Operations for Urinary Calculi upon Procreation in the Male—J. S. White, Tenn.; J. B. McCaw, Va.; R. C. Foster, Tenn.

Mercurial Fumigation in Syphilis—D. W. Yandell, Ky.

Cause and Increase in Crime—W. C. Snead, Ky.

Resolution made and accepted that a seal of this Society be given to every Medical College in good standing, to be withdrawn upon sufficient evidence.

AFTERNOON SESSION.

The Association was called to order by the First Vice-President.

The President requested the Committee on the Hunter Memorial to retire for private business.

Report of Committe on Medical Topography and Epidemic Diseases referred to the Committee on Publication.

Committee on Hospital Epidemics discharged.

Committee on Puerperal Fevers discharged.

Committee on Veratrum Viride discharged.

Committee on Improvements in Surgery referred to the Section on Surgery.

Committee on Inebriate Asylums referred to Committee on Publication.

The President called for a report of each of the Sections.

1st. Anatomy and Physiology; referred to Committee on Publication.

2. Practical Medicine and Obstetrics; report adopted.

3. Section on Surgery; report adopted.

4. Meterology; report adopted and referred to the Committe on Publication.

Resolutions from the Essex County Medical Society of New-Jersey were offered and adopted.

Moved that a Special Committee be appointed to confer with the different Legislatures on the subject of the resolutions.

Motion made and carried that Dr. Cox be continued on the Committee on Necrology.

Report of the Committee on Tracheotomy was read; adopted. Referred back to Committe, to continue and report next year.

A communication from the Judiciary Committee of the Connecticut Legislature was read, asking that a committee be appointed to report a bill upon the subject of Criminal Abortion, for action at the next session; carried.

The Chair will appoint a committee in due time.

Moved that the American Medical Teachers' Convention be perpetuated in connection with the American Medical Association, and delegates appointed to meet from each Medical School, the day before the American Medical Association at the same place.

Amended to "meet regularly," instead of being perpetuated; carried.

Moved that the Committee of last year on this subject be continued.

Moved by Dr. Atlee that the Hunterian Committee be empowered to fill all vacancies in it; carried.

Communications from Elmira, N. Y., read. Referred to Surgical Section.

Moved and carried that a vote of thanks be offered to Dr. Bemiss, for his efficient services as Secretary: Amended by substituting "retiring officers."

Resolution offered of thanks from this Association to the Faculty of Yale College, and to the citizens of New Haven, for their elegant hospitality and kindness during its stay here; carried unanimously.

Dr. Hooker spoke to the Convention in regard to commutation tickets.

Moved that the Convention go into committee of the Whole; Carried. Dr. Askew in the Chair.

A discussion was called up in regard to the Resolutions of Committee on Education, Dr. Reese, Chairman.

Dr. Gardiner moved the Committee rise, report progress, and refer the resolutions entire to the Committee on Publication.

Dr. Hamilton, of Brooklyn, offered a resolution for a bill for the establishment of a College of Physicians and Surgeons of thd American Medical Association. Discussed by Drs. Hamilton, Gardiner and others. Resolution withdrawn.

Dr. Dixi Crosby addressed the Convention as to its general action.

Motion made that the Convention adjourn *sine die.* Carried.—(*American Medical Monthly.*)

We copy from the *Medical and Surgical Reporter* the resolutions submitted by the "Committee on Medical Education."

Whereas, It is the deliberate judgement of the American Medical association, that the time has fairly come for the introduction of improvements into the present system of medical education, which shall elevate the existing standard of qualification for the Doctorate, and especially for securing and encouraging a higher degree of attainment in the science and of skill in the art of medicine than has been heretofore accessible to students in our country, and

Whereas, This body of American Physicians is regarded by our fraternity everywhere, as the acknowledged head and representative of the medical profession in the United States, and it is therefore looked to for prescribing the terms and qualifications of those who are henceforth to be admitted and recognized into our fellowship as brethren and equals in the profession; therefore,

Resolved, That it be hereafter regarded as an indispensable pre-requisite to enrollment as a student of medicine in the office of any regular physician, that the party shall be at least seventeen years of age, of good moral character and habits, and shall have received a good English, classical and mathematical education, and be able to read and translate the Latin language, and have an elementary knowledge of Greek, so far, at least, as to be able to trace the derivations from it to the English language.

Resolved, That this same requisite be made indispensable before matriculation in any regular medical college can be allowed, and that the faculty of such college, and the preceptor of such candidate for enrollment, be required to ascertain such qualification by actual examination, and to certify thereto.

Resolved, That the term of study in the office of a regular practitioner, including attendance upon lectures, be, and is hereby extended to four years, the last year to be employed in receiving clinical instruction in medicine, surgery, and midwifery.

Resolved, That three full courses of lectures in a regularly incorporated college, or other body of lecturers recognized by the Association, be required of all candidates for the degree of Doctor of Medicine. Said candidates may be admitted to examination after three full years of study, on all the branches which they have been required to study, except clinical medicine, as above.

Resolved, That the period of instruction in every College be extended through the full term of nine months in each year, and that this time be divided into two sessions, the first to be chiefly occupied in instruction in the elementary branches only, and the latter to the practical and more complete branches. Those in attendance upon the former to constitute the junior class and those upon the latter the senior. Not more than four lectures to be delivered on each day in either of the departments, and that each lecture be preceded by a recapitulation, in the form of question and answer, of the lectures of the day before.

Resolved, That the number of professors in each college should be increased, so as to bear some proportion to the largely increased number of branches, a knowledge of which is necessary. This increase to be made in addition to those holding clinical chairs.

Resolved, That the examination of all the students for matriculation, which admits them into the junior class, shall be repeated before their entrance into the senior class, either by the Faculty, or by examiners appointed by them for the purpose, who shall certify in the one case to the fullness of their preliminary education, and in the other to their improvement, under courses of instruction in the junior or elementary department. Admission to the senior class should be contingent upon this latter examination. Similar examinations should be required at the commencement of each session, as to the improvement made in the preceding term.

Resolved, That the final examination for graduation, if made by the Faculty, should be in the presence of each other, and should be witnessed and certified by a board or committee of equal numbers, to be appointed for the purpose by each State Society, within whose bounds any college may be located, or by the Faculty, and without whose approval the degree should not be confered. Due notice to be given by the faculty of the time and place for the examination, and each candidate to be separately examined.

Resolved, That no medical college be recognized by the American Medical Association to be complete in its organization, and prepared to furnish the requisite instruction, which does not either possess a hospital of its own, or which has not made arrangements with a hospital containing not less than 80 beds, for the students of the college receiving regular clinical instruction, before being licensed to practice.

Resolved, That the so-called "College Clinics," cannot in any useful or practical sense, be looked on as furnishing an adequate substitute for the clinical teaching required.

Resolved, That this Association regard with marked disapproval a practice which prevails with some of the

Faculties of the Schools, viz: Of examining those students who are candidates for a degree, before the expiration of the regular session, and while the lectures are still in progress.

Resolved, That the titles of the several chairs in a school, as anounced in its curriculum, ought to indicate a real teaching of the branches thus virtually promised to be taught, and not be assumed merely in conformity with further usage, or to gratify the temporary whim of a professor, to have an appendage to the title of his chair, while in the very next year he may abandon, and consent to its being appended to some other chair, or to its being omitted entirely in the next annual anouncement. We may instance this, attaching physiology to anatomy, the latter being the substantive branch, and of itself taking up the whole time of the professer during the entire session, which is still too short for its legitimate purposes. Still more common and misleading is the appendage of diseases of women and children to midwifery, and that of medical jurisprudence at one time to materia medica, at another to midwifery, at a third to chemistry.

All of which is respectfully submitted.

(Signed) D. Meredith Reese, Ch'n, (N. Y.)
John Bell, (Phila.)
W. K. Bowling, (Tenn.)
Z. Peletier, (Mich.)
Chas· Fishback, (Indiana.)
Committee on Medical Education.

Lecture on the Local Effeets of General Diseases. By Claude Bernard. (From *Med. Timee and Gaz.*)—" That local affections, when unattended by general symptoms, cannot be viewed in the light of real diseases, and that the vessels or nerves are invariably the agents through which disorders, engendered upon a single point, are enabled to pervade the entire organism, has, we believe, been proved in our last lecture beyond the possbility of a doubt.

The various glands disseminated throughout the system have, as you are well aware, been divided into two great classes; those which extract from the blood certain special principles, which communicate to each particular secretion its own individual properties; and those which, on the contrary, appear to secrete the blood itself, if I may be allowed to use the expression, or, in other words, to enrich the circulating fluid with the products elaborated within their own tissue. Such, at least, are the views which have justified several physiologists in placing by the side of ordinary glands, the spleen, the thymus, the supra-renal capsule, and other highly vascular organs not provided with an excretory duct. The lungs, in which the great process of oxygenation is accomplished, exhibit, in its full force, the power attributed to this second order of glands; and the liver, which, if the biliary secretion is alone considered, belongs to the first class, is at the same time included in the second, on account of the grape-sugar which it produces. Now the influence of motor nerves on secretion is universally acknowledged; while the sensitive fibres are known to enjoy the property of setting in motion the opposite system; we are, therefore, naturally led to the conclusion that affections confined, at the outset, to one particular spot, may frequently poison the blood through a vitiated secretion of its fundamental elements, and thereby exert a deleterious influence over the whole system.

But diseases, however general in their nature, must always be viewed in connection with material alterations occurring within the body. The immortal writings of Bichat have taught us to look upon the vital powers not as forces independent of matter, but as the mere natural results of the properties enjoyed by matter, when impregnated with life; in this manner does the contractile force, in muscles, arise, as Haller expressed it, from the power of contraction possessed, by each individual muscular fibre; and, in this manner, are the general properties of the nervous system to be referred to the faculties bestowed on each individual filament. The old notions on this subject are, however, recalled by the name of vital *powere*, which Bichat still employed for the purpose of expressing the properties of living organic matter; and in the use of words alone does he follow the example of the ancients, whose views on the subject were entirely different from his own. Since that moment the labors of our contemporaries have invariably followed the same direction. Pinel overthrew the doctrine of essential fevers, and struggled to prove that anatomical lesions were invariably their cause, however difficult it may be to discover them in certain cases. Broussais upheld the same opinions, in his various chapters on hectic fever; and science is now pursuing the same track; in the properties of matter alone do we seek the cause of physical phenomena, whether belonging to organic or inorganic bodies. If, however, we endeavor to advance a step further, and to examine the intimate nature of the properties with which matter is endowed, we are at once brought to a stop; to solve the problem is not within the power of human reason.

There exists, therefore, no disease whatever which is not connected with a local injury; but after firmly establishing this great principle, we are often at a loss to determine whether the disorders which occur for notice, in the organs of patients who die of certain maladies, are the cause or the results of the disease; thus, for instance, the hypertrophy of the spleen which usually accompanies intermittent fever, and the intestinal ulcerations which coincide with typhoid affections, are held by some physicians to be the cause, by others, the mere consequence of the disorder. Physiology shows us that in the majority of cases, morbid alterations are the effects of sickness, instead of being the hidden springs which gave it birth. Let us recall to mind for a single moment, the symptoms of the disease artifically provoked by injecting sand into the capillary vessels; an intense fever shortly makes its appearance, through the mere effects of nervous sensibility; now, in this case, the fever is not *sine materia;* a well-known cause has called it into play: yet, under these circumstances, what modification has occurred within the nervous system? Who shall teach us the difference which exists betwen a nerve in a state of rest, and a nerve in a state of intense irritation, from outward agents? Let us not, however, be too much ashamed of our ignorance in this respect; it is no disgrace to the Medical Sciences; in fact, no branch whatever of human knowledge is totally exempt from similar difficulties: is their a natural philosopher who will undertake to assign the difference between the molecular arrangement of a magnet, and that of an ordinary bar of steel? The inference to be drawn from these reflections is, that we are never entitled, even in the most embarrassing cases, to admit the existence of a physiological symptom which does not result from some material cause; but the imperfections of our actual knowledge, on the one hand, and those of the human mind on on the other, render it impossible to seize in every case the mutual relation which exists between them.

The consequences of disease are, therefore, various anatomical lesions, which must not be viewed as the starting-point of the morbid series. In eruptive fevers the only characteristic lesion with which we are acquainted is a cutaneous disorder; no one, however, would think of describing the variolic pustulæ as the hidden source of the predominant affection. We are thus led, by a natural train of reasoning, to inquire in what manner general diseases become local, after having ascertained the process by which local diseases become general: the two questions are most intimately connected.

A poison being introduced into the economy, the animal dies; a series of morbid phenomena have been produced, the explanation of which is not always forthcoming when the autopsy is made. But in the easiest of all cases—that of fever,—is not a simple wound capable of producing the disorder? And if the animal happens to be ill-disposed, does it not sometimes die from the general reaction provoked? and are not local alterations (pneumonia, for instance), often found to exist? We have even ascertained that in order to make any given organ the seat of disease, nothing more than the section of the corresponding branches of the sympathetic nerve was requisite; we therefore discover, in this very simple morbid series, two separate terms. In the first place, a local affection which becomes general; and, in the second a general disease, which fixes upon one particular point. How can entirely local lesions, such as congestion, inflammation, and the formation of pus, be most conveniently explained when arising from general causes? The circulation has evidently been put out of order; and it has been presumed that the sympathetic nerve, so intimately connected with vascular physiology, is the channel through which the morbid impulsion is transmitted. Now, when inflammation commences, the capillaries become the seat of peculiar phenomena; circulation is at first accelerated, and afterwards retarded; fibrin accumulates in the little vessels and fills them up; and the point on which the obstruction arises, is known to be the primitive seat of inflammation. The buffy coat which, after blood has been drawn, rests on the surface of the clot, is a characteristic symptom in all inflammatory diseases. But how is its formation to be explained? what prevents the blood from coagulating as in a healthy state? A change has evidently taken place in the density of the fibrin which it contains, since, instead of imprisoning the globules, as usual, in its meshes, it rises to the surface of the liquid in consequence of its lesser specific gravity. For this reason alone is the clot formed in an unusual manner; for it seems highly probable that the fibrin dissolved in the blood, the density of which it increases, is intended to hold in suspension the blood-corpuscles; in fact, we see these little bodies fall to the bottom of a basin containing defibrinated blood, leaving the serum entirely colourless. It therefore may be advanced that in inflammations the fibrin contained in the blood has grown lighter than usual, since, when the fluid drawn from the veins is allowed to rest, it rapidly rises to the surface.

When the capillary circulation is examined under the microscope, the globules are seen occupying various positions; some of them adhering to the sides of the vessel, others rapidly moving in the sanguine torrent. After injecting into the arteries a large amount of defibrinated blood, M. Poiseuille saw the blood-corpuscles form, as it were, a precipitate in the little vessels, as if obeying the ordinary laws of gravitation; and obstructions of greater or lesser extent were, in this manner, rapidly formed. Supposing no special predisposition to exist in the economy, the liver and lungs would, of course, become the principal seat of similar impediments: the vascular organization of their tissue explains the preference. By this simple train of reasoning we can easily understand the creation of vascular deposits in various points of the body, under the influence of a modification in the physical properties of fibrin, when inflammation is produced; but when the blood ceases to be in motion in the center of our tissues, the temperature of which is always sufficiently elevated to favor the action of chemical affinities, a putrid decomposition of the globules soon takes place; the assertion may easily be proved, by allowing defibrinated blood to stagnate for a short time in a basin, under a temprature of 95°. The blood-corpuscles are collected at the bottom of the recipient; the serum in the upper parts remains therefore unaltered; but let a small quantity of the same liquid be drawn, with a glass tube, from the immediate vicinity of the globules, and it will be found to contain both sulphuretted hydrogen, and other products of decomposition.

Let us now inquire what is likely to result from the accumulation of putrid deposits within the principal organs of the economy; a local irritation will, in the first instance, be produced, which, acting through the sensitive nerves upon the system as a whole, brings on general symptoms again: let us add to these the poverty of the blood, which an imperfect nutrition no longer supplies with its proper elements, and the presence of deleterious substances arising from putrefaction, within the torrent of circulation; and it will astonish no one to see so important an assemblage of morbid phenomena ultimately end in death. Thus we find that a complete series of morbid symptoms frequently arises from an entirely local irritation, and follows out its natural course when once the starting-point is given.

But fever is not, after all, the only mode in which general affections are enabled to bring on local disorders. In eruptive diseases, for instance, another totally different cause may be supposed to act. Let us inject, for instance, a large dose of carbonate of ammonia into the animal's veins; after experiencing, for a time, considerable uneasiness, the animal recovers, the noxious substance having been gradually eliminated. In this case, we find an instance of a general disease without any local disorder; but we are aware, at the same time, that poisons, however widely distributed through the economy, produce local effects: phosphorus affects the lungs, and cantharides the bladder; and the peculiar mode in which these alterations take place is well known to you—namely, the elimination of the toxic agent through special organs. Now, in eruptive fevers, an entirely similar process takes place; an irritating substance is expelled by the skin, and leaves there deep marks of its passage: here, then, we have an action of a purely mechanical character, which does not offer the slightest analogy with those we have just referred to.

It now remains for us, gentlemen, to inquire into the influence exerted by exterior agents upon the histological elements of living tissues, and the modifications to which they give birth; and, in pursuing these investigations, we shall be struck with the differences exhibited by the various organs, whether considered in the various degrees of the animal scale, or in animals of the same species, or even in one and the same individual, when one apparatus is compared with another; and after having ascertained to what extent, and with how great intensity they are acted upon by medicinal agents, we shall be prepared to examine the process by which medical influence is enabled to struggle against disease, and sometimes to overpower it."

Different Modes of Burial by Ancient Romans—The President requested Dr. Gajani to repeat what he had mentioned to him on this subject; and he remarked that, after much investigation, he was convinced that some high Roman famlies adhered to the modes of interment practiced by their ancestors; those of native or Etruscan origin interring the body, and those of Latin or Trojan descent (as they called it), burning it. The two races made their tombs and catacombs on opposite sides of the Tiber. The tomb of the Scipios was originally on the Vatican Hill, but removed across the river, where it has been discovered in modern times. Dr. G., believes that none of the Etruscan vases ever contained human remains. They are not large enough, and nothing has ever been found in any of them. They were probably mere ornaments. This view is opposed to the long recived opinion that all the Romans, for a time, interred their dead, and afterward universally adopted the custom of burning them. The Julian family and that of the Scipios appear to have been of different races. Campana, who first entered the tomb of the Scipios, affirmed that he saw the form of a man's body on a bier, which soon crumbled and disappeared under the effect of the air. The bier, being of iron, remained. Six pounds weight of gold was found.

Judge Daly remarked that he had seen marks of fire on some of the remains in Etruscan tombs. Dr. G., replied, that these might have been the contents of later tombs in the same place.—*Bullet. American Ethnol. Society*, April 17, 1860.

Garrod on Gout.—In the number for May of the *Dublin Quarterly Journal of Medical Science*, (one of the ablest journals published in the English language) we notice an excellent review of Dr. Garrod's book on Gout. Dr. Garrod has settled definitely the question of the materies morbi of gout. It is *uric acid.* There is no alteration of the fiebrin globuls or of the serum, except that the latter contains in this disease abnormal quantities of uric acid. Dr. G. has devised a simple method of determining approxmatively the quantity of uric acid in the serum of the blood. Here it is:

"Take from one to two fluid-drachms of the serum of blood, and put it into a flattened glass dish or capsule; those I prefer are about three inches in diameter, and one third of an inch in depth, which can be readily procured at any glass-house; to this add ordinary strong acetic acid in the proportion of six minims to each fluid drachm of serum, which usually causes the evolution of a few bubbles of gas. When the fluids are well mixed, introduce a very fine thread, consisting of from one to three ultimate fibres, about an inch in length, from a piece of unwashed huckaback or other linen fabric, which should be depreseed by means of a small rod, as a probe or point of a pencil. The glass should then be put aside in a moderately warm place, until the serum is quite set and almost dry; the mantal-piece in a room of the ordinary temperature, or a book case, answers very well, the time varying from twenty-four to forty-eight hours, depending on the warmth and dryness of the atmosphere.

"Should uric acid be present in the serum in quantities above a certain small amount noticed below; it will crystallize, and during its crystallization will be attracted to the thread, and assume forms not unlike that presented by sugar-candy upon a string, when in the dark field under polarised light, it has an appearance represented in the woodcut, fig. 10. To observe this, the glass containing the dried serum should be placed under a linear magnifying power of about fifty or sixty, procured with an inch object glass and low eye-piece, or a single lens of one sixth of an inch focus answers perfectly. The uric acid is found in the form of rhombs, the size of the crystals varying with the rapidity with which the drying of the serum has been effected and the quantity of uric acid in the blood. To insure perfect success, several precautions are necessary.

"1. The glasses should be broad and flat; watch-glasses of the ordinary kind are not suitable, being too small, allowing the fluid to be frequently spilt, and also too much curved, causing the film of partially dried serum to curl up and split.

"2. The acetic acid should be neither very strong nor weak. The glacial acid often forms a gelatinous compound with the albumen of the serum, producing flakes; and very weak acid adds unnecessarily to the bulk of the fluid. By experience I find the ordinary strong acetic acid (about 30-100) well suited for the experiment.

3. "The character of thread and its quality are of some moment. Very smooth substances, as hairs or fine wire, but imperfectly attract the crystals; if the number or length of the fibres be too great, and the amount of uric acid small, the crystals become much scattered, and therefore but few appear in the field of the microscope. The glass should not be disturbed during the drying of the serum, or the crystals may become detached from the thread.

4. "Some attention to temperatureis necessary; if the

serum be evaporated at a high temperature, above 75° Fahrenheit for example, the drying may take place too rapidly to allow crystallization; the temperature of an ordinary sitting-room answers well for the purpose; it should be protected from dust.

"5. If the serum be allowed to dry too much before the examination takes place, the surface becomes covered with a white efflorescence, consisting of feathery phosphates, which may obscure the thread, and which are represented in Plate vi., fig. 4, *c;* they can be removed by the addition of a few drops of water before placing the glass under the microscops; sometimes over-drying causes the film to become cracked or fissured throughout, as well as covered with the phosphatic efflorescence.

"6. It is well, when practicable, to put up two or more glasses with the same serum.

" 8. The blood should be recently drawn, or at least no change or decomposition should be allowed to take place in it before the experiment is made, for uric acid when in contact with animal principles is liable to undergo decomposition, as we shall subsequently have occasion to show."

This process is not a very delicate one; but for clinical purposes this is in itself a great advantage, for it is necessary that the uric acid should be present in abnormal quantities for its presence to be indicated by the thread experiment. From a series of well devised experiments to ascertain the lowest amount of uric acid indicated by the process, Dr. Garrod forms the following conclusion:

"From this it appears that an amount of uric acid equal to at least 0.025 grain in the 1000 grains of serum, in addition to the trace existing in health, is required before the 'thread experiment' gives indication of its presence, and hence the appearance of uric acid on the the thread is complete evidence of an abnormal or morbid quantity in the blood. In several experiments on the blood in gout and albuminuria, where quantittaive determinations were made, the amount of uric acid in the 1000 grains of serum was found to vary from 0.045 to 0.175 grain."

Another circumstance of importance is that the experiment should be tried with perfectly fresh serum, as in the process of decomposition the uric acid is converted into oxalic acid, which itself disappears as the decomposition progresses. Having thus explained the method of examination, the author gives in a tabular form, the details of forty-seven examinations of the blood, and the symptoms and particulars of each case, which abundantly prove the statement, "that the blood in gout is rich in uric acid."

It appears, moreover. that the serum obtained by blisters will also afford uric acid with the thread experiment, so that this method of obtaining serum may be resorted to in cases where, for purposes of diagnosis, an examination is desirable, but where venesection cannot well be employed. The blistering agent must be applied, it appears, to an inflamed surface; for the existence of inflammation, at least of a gouty character, has the power of destroying the uric acid in the blood of the part, and hence prevents its appearance in the serum. The slight inflammation, however, produced by a blister applied elsewhere does not destroy the acid. This power of gouty inflammation to destroy uric acid is, as the author observes, a fact of great interest.

"Should further inquiry confirm the conclusion to which the above limited number of observations point, namely, that during the existence of gouty inflammation there is a destruction of uric acid in the blood of the locality, and other independent researches which I have made appear to favor this idea, it will throw no small light mated or named by the alterations which the hyaline subon the pathology of gout, and show the reason of the apparent improvement in the health which frequently follows a severe and prolonged fit of the malady."

On the True Relation between Synovitis and Ulceration of Articular Cartilage. By RD. BARWELL, F. R. C. S. E., Asst.-Surgeon, Charing, Cross Hospital, London. In the *Edinb. Med. Journ.*, for Feb. 1860, is a valuable paper under this title. Dr. B. after giving something of the progrsss and present state of our knowledge of the physiology and pathology of the articular cartilages, and referring to a paper, "on the nutrition, inflammation, and ulceration of articular cartilage," published by him in the *Med. Chir. Review* for October 1859, says:

The paper already referred to, as published by myself in the *Medico-Chirurgical Review*, was devoted to showing the source whence articular cartilage was nourished, as already mentioned; also, more particularly, to proving that the diseased actions, which Ecker, Goodsir, and Redfern described as taking place in articular cartilages was, in all cases of inflamed joints, actual inflamation; while, in other cases, it is mere degeneration, comparable to the degeneration of the cornea in arca senilis or other such diseases. The points upon which stress was more particularly laid were summed up thus:—

1*stly*, That, although in the articular cartilage itself there are no vessels, there are situated immediately within the articular lamella a set of arteries destined to supply the cartilage with nutriment.

2*dly*, That the articular lamella is composed of a finely tubular structure, which allows the nutrient fluid to find its way to the cartilage in finely divided streams.

3*dly*, That the cartilage has no other source of nourishment.

4*thly*, That the diseases of cartilages must not be estistance undergoes, but by those which take place in the cells.

5*thly*, That a certain number of these diseases are degenerative, but the larger number decrease or increase in the generative activity of the cells; the last of these attends all inflammatory diseases of the joints, and are themselves inflammation.

6*thly*. That the hyperœmia of this inflammation is situated in the vessels immediately beneath the articular lamella, and it is this hyperœmia which gives rise to the symptoms usually supposed to be produced by ulcerating cartilage.

7*thly*, That simple degenerative diseases of the cartilage, as they produce no hyperœmia, so they produce no symptoms.

If these points be accepted as proven, which indeed I believe them to be, we have for the subject of the present inquiry not simply, whether synovitis will by its own action, produce ulceration of the cartilages, but rather the following queries:—As in an articular inflammation of some standing, both the synovial membrane and the cartilage are inflamed, are we to cônsider, that one inflammation is produced by the other, or that both are immediate effects of the same cause, neither being secondary to the other?

A destructive inflammation of the joint, with suppuration and production of false membranes, can rarely be examined so early in the malady, that we can find the first commencement of morbid action in the cartilages. I have been, however, sufficiently fortunate to have had the opportunity of inspecting a knee-joint in an early stage of this form of synovitis; moreover, as Professor Weber of Bonn remarks, we find among the small bones of a hand or foot amputated for joint disease, one or more of the small articulating surfaces in a very early stage of the affection. It is necessary, however, in such an examination to be perfectly sure whether the disease is truly one commencing in the joint or in the bone; at present we have only to do with the former condition.

The first thing observable is certainly redness of the synovial membrane, arising from hypeœria of the synomvial vessels; as this increases, it is accompanied by actual evtravasation, here and there, into the tissue; and then follows slight opacity of the true synovial membrane. Very shortly after this the membrane looses its polish and smoothness, by the growth from its inner surface of fine papilla-like elevations, which consist at first of round cells. These grow very rapidly, detaching any fibrinous concretion that may have formed, till they produce actual false membranes, with a granulating free surface, which have been generally described as encroaching on the cartilage. Now, as folds of synovial membrane always lie over the cartilage and conceal its edge, it follows, that when any addition is made to its internal surface, the cartilage must be still more concealed; even though there be not more false tissue at those particular points than elsewhere. About this time appear in the cartilage some slightly elevated spots, which have lost their brilliant polish and translucent appearance, and have become of a dead, dirty-yellowish hue. These specks may be in any part of the cartilage, under the thickened fold of synovial membrane, where no false membrane as yet exists. If a section be made perpendicularly through one of these spots, it will be found to be conical in shape, the base being at the free surface, the apex deep in the structure of the cartilage. The depth, at which the apex may be, increases with the age of the disease; sometimes there is a very perceptible breadth of apparently healthy cartilage between it and the attached surface; later, the cone is truncated by the bone.

If the section be examined by the microscope, it will be seen that, at the diseased part, the cartilage corpuscles, have become much larger, and the cells contained in them have also greatly increased both in size and number, each one being provided with a number of nuclei, and having become more or less granular; some of them also contain oil-globules.

This disturbance of the usual condition commences below the part which looks to the naked eye diseased; but becomes more and more marked towards the free edge of the section where many of the swollen corpuscles loose their distinctness of outline, and even coalesce. The indistinctness of outline is owing, according to Rokitansky and Weber, to gelatification of the hyaline substance, but this assertion requires proof; it is certain, however, that during and in consequence of this alteration of the cells, the hyaline substance becomes obscurely granular, striated and fibrous, and is studded around the altered cells with oil-globules; it also assumes a yellowish colour.

The free surface of these unhealthy spots, examined by the microscope, presents a rough uneven surface, full of irregular depressions and equally irreglar elevations. The depressions are formed by the rupture of swollen corpuscles, and the elevations, which are fibrous or velvety by the projection onwards of the altered hyaline substance. Scattered over this surface are many cells, with several nuclei, and more or less granular, some of which are undergoing further changes, becoming fusiform or even stellate.

As the affection continues, the false tissue increases in thickness, and now really begins to encroach upon the cartilage. This is a gelatinous, more or less translucent mass, generally very light in colour, being rather more straw-coloured, or rather, more rosy, according to the stage of its development and its supply of vessels. That part of the tissue, which lies on the synovial fringes, and with which we have now more especially to do, must, as it passes around the joint, with those folds, assume a ring or band-like form, overlapping the edge of the cartilage. Into this zone vessels, prolongations from the synovial plexus, penetrate; they run like small almost straight scarlet threads, with but little ramification or branches through the tissue from its inner to its outer edge. This inner edge is roughened by little velvety or papilla-like processes, and very soon some of these papillæ begin to sprout forth unevenly, some being barely visible to the naked eye, others attaining an appreciable size. These latter contain each a vessel, and send out lateral branches, so that the whole assumes a tree-like form, and the surfaces even of these branches are studded with papillæ. Examined microscopically, these granulations are seen to consist of a mass of fusiform and round nucleated cells, bare nuclei granules and fibres. The new parts—that is, those on the surface and the papillæ—are simply heaps of cells and nuclei; the older contain cell-fibres, which cross each other in every direction, but preserve chiefly that of the vessel, and form a net-work, in the meshes of which the cellular elements are piled up; the older parts seem also to be contained in a structureless membrane, from which the cells of the papillæ grow.

This whole apparatus of zone-like false tissue, with its ramifications and its plexus of vessels, can be lifted entirely from the cartilage, wherever that structure has remained sound; but, wherever it has undergone the alterations already described, there occurs an inextricable coalition of cellular and fibrous elements of the false tissue, with the cellular and fibrous elements of the cartilage, the two passing by actual continuity one into the other, so that it becomes often impossible, in the neighborhood of this debateable land, to determine where many a fibre ceases to belong to the cartilage and to become pseudo-membranous, or whether many a group of cells belong more properly to the one structure or to the other.

The disease in the cartilage still spreads, and approaches more and more the attached surface; the hyaline substance becomes striated and fibrous over a larger area and greater depth; the corpuscles increase in size and burst, discharging the cells into the surrounding structure, in which many apparently empty rifts and chasms are perceptible. The directions of these cracks appear peculiarly arbitrary; some of them run with the fibres, others directly, others obliquely across them; many of them terminate at either end more or less abruptly, but some of them—and this of course depends on a fortunate position of the section—are seen to diverge from a centre larger than any one of the branches, which are themselves larger near the centre than towards their termination; the whole shape is like that of a crack or star in a pane of glass, produced by striking it with any small object. On examining this stellate rift more closely, it will be seen to be granular throughout; on applying dilute acetic acid the granules fade, and in the centre of the star one or more nuclei will become evident. In fact, this apparently emptly space is not empty at all, nor is it a series of cracks in the hyaline substance, whose directions are accidental. It is a stellate cell developed from one of the cartilage cells, that had been scattered from a ruptured corpuscle, and which is in form and size exactly like one of the cells so characteristic of areolar tissue.

Although the disease now under consideration is that form, which begins on the free surface of the cartilage, it is not of course confined there; a hyperœmia in the vessels beneath the articular lamella accompanies, is an essential part of, the affection; there is an inflammatory *stasis* and exudation of plasma, which cannot, in any large quantity, find its way through the articular lamella. Hence formation of false membranes in the cancelli, and engorgement of the Haversian canals. The bony plates, supporting portions of the articular lamella, give way, and the false membrane bulges out of the opening. By this means the superimposed cartilage is in a great measure deprived of nutriment, and that which has not been already destroyed by inflammation yields to fatty degeneration. This condition of parts, viz., the presence of false membranes which overlie and penetrate the cartilage, is that which Mr. Key so admirably describes in the eighteenth volume of the *Medico-Chrurgical Transactions;* but, although his description is admirable, his interpretation of the phenomenon is certainly incorrect; for it is impossible that one living substance (the cartilage) can be changed, liquefied, and absorbed by another with which it has no connection, as may happen with a substance which has lost its vitality, like diseased bone. My investigations into this process have led me to a different conclusion, and the facts which militate against Mr. Key's theory are many and important.

The process which the cartilage undergoes before it is changed into that fibro-cellular material just described is one of inflammation; the great activity of the cells and nuclei, the superabundant growth of the corpuscles, show an exaggeration in the nutritive functions, which is the essence of inflammation. Now, it is impossible to imagine any kind of organic influence exercised by one tissue upon another, with which it is quite unconnected, that shall change the whole course of its nutrition, convert it into another structure, and then absorb it. It is true that when a new growth or bulk of any sort presses upon some tissue, it soon produces absorption thereof; but this absorption does not take place by vessels of the new growth, but by an action proper to the absorbed tissue itself. Again, a malignant disease commencing at one spot will gradually infiltrate the parts around, and so far change their nutrition as to convert them into cancer; but this is a propagation of disease along a continuity of tissue. There is no continuity between the parts of the false membrane, which are supposed to affect the cartilage, and the cartilage itself while yet unaffected. And hence it cannot be supposed that this false membrane, "by means of its villous processes, forms a groove in the edge of the cartilage, thus commencing the work of destruction." Moreover, many of these roughened and discolored spots on the cartilage occur at points where no false membrane has as yet penetrated, and which are so placed as not to be within reach of the synovial membrane, and yet sections of these spots have just the same appearance as those, with which false tissue is in contact or even in continuity; moreover, these spots continue to increase in breadth and in depth, whether false tissue have reached them or not.

On the other hand, on lifting the false tissue from the cartilage it will be seen that a great part of that structure beneath them is sound, and it is only in spots of more or less size that these changes have taken place; in the smallest spots, and those which hardly as yet penetrate beneath the surface, adhesion between them and the false membrane is often absent.

Therefore this part of the argument may be thus concluded, that—

1*stly*, It is inconceivable how the false membranes should produce the changes in question.

2*dly*, That these changes take place in parts of the cartilage, which have not been in contact with false membrane.

3*dly*, That in parts covered by false membrane a large portion of the cartilage often remains sound.

The only conclusion which can be legitimately drawn from these facts surely is, that the change which has been ascribed to an influence of false membrane takes place quite independently of that tissue; and wherever the altered cartilage and false tissue happen to come into juxtaposition, the two adhere together—not on account of any gluttonous propensity for cartilaginous food peculiar to false membranes, but simply by the same law, which causes two granulations in an ulcer, when they come in contact, to adhere.

If a granulation from any open ulcer, or from any wound healing by that means, be examined microscopically, it will be found to consist of a number of cells and nuclei heaped up together, masses of which are enclosed in the meshes of a network of fibres (cell-fibres and nuclear-fibres); in fact, of the lowest generally a transitory stage of areolar tissue. Cartilage belongs to a histological class, which has been called connective tissue, in imitation of the German word "*Bindegewebe.*" It was Donders, of Utrecht, who first pointed out the close connection between bone, cartilage, areolar tissue, ligament, etc., and showed them all to belong to that histological series; and, indeed, it is impossible to avoid concurring in the cogency of the reasoning which connects the cartilages, through the fibro-cartilages, with these other tissues. Now when an articular cartilage undergoes the process above described, it is in fact undergoing a metamorphosis, which at first assimilates its structure to the fibro-cartilages and then further leads it down to a condition very analogous to nascent areolar tissue—in fact, to a condition similar, therefore, to false membranes. This is still further proved by the fact that some cartilage cells of the altered structure* may be not unfrequently seen to shoot out processes and branches, and to become similar to the well-known branching cells of areolar tissue. What else, then, can be expected, when two tissues so exactly similar as the altered cartilage and the false membrane, or granulation from the synovial tissue, come in contact, but that their elements should intermingle—but that they should, as said above, adhere like the granulations of an ulcer?

The synovitis and the false membranes, therefore, do not produce these changes in the cartilage. It remains still to inquire, what it may be which sets up these actions? It has been shown that this form of ulceration of cartilage is in fact inflammation of that structure, and it can hardly be denied, that such inflammation and the synovitis own the same cause; in fact, the disease is not merely a synovitis, it is an arthritis affecting the tissues which line the cavity of the joint. Whatever the irritation may be, which produces this arthritis, it affects those lining tissues equally, although the one may respond to that irritation more slowly than the other. The synovial membrane is not closed sac, but a tube, the ends of which are occupied by the cartilage, so that the two structures together close in the cavity of the joint. The synovial membrane consists of one or more layers of cells, outside which is a fine membrane, on whose outside is a plexus of vessels yielding pabulum to the cells, the fluid from the vessels passing through the basement membrane to the cells. The whole apparatus, constituting the cartilaginous structure and its nutrient provision, consists of a layer of cells with intercellular substance, then of a fine bony stratum, which allows fluids to pass to the cartilage from a rich plexus of vessels at its other side, derived from the same vessels whence the synovial plexus arises. The histological parallel between the two structures, that shut in the joint cavity, is complete; and it must be evident, therefore, that if there be a cause of irritation in the joint, it would affect both those structures, without any necessity that we should suppose irritation of the one depending on irritation of the other.

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* This only relates to the cases in which the changes begin on the free surface.

The conversion by inflammation of the cartilaginous structure into a lower form of connective tissue is a remarkable instance of the *vis medicatrix naturæ*; for, when the arthritis has reached such a point, that the apparatus could no longer be used as a smooth frictionless joint, obliteration of that joint by anchylosis is the desirable termination, and therefore the cartilage is changed into that tissue, which most readily contracts adhesion, or grows together—a tissue, namely, analogous to granulations; and at the same time, and for the same reason, the synovial membrane is converted into a granulating surface. When the action is moderately slow, so as not to override power, the effect aimed at by nature is produced, and a membranous anchylosis, which may afterwards be converted into a bony one, is formed. But if the inflammatory action be too rapid, the beneficial intention is opposed by a law of nature, which, in its simplest form, appears to run through all inorganic, organic, and even mental action. The law in this simple form is, What is gained in power is lost in time; and its inverse, What is gained in time is lost in power. Reduced to its expression in the organic world, the law may be thus formularised:—A formative action which is slowly conducted produces tissues of power sufficient to endure; but a formative action hastily conducted produces tissues so feeble as to be transitory. Hence a really chronic inflammation of this form will often end in anchylosis; a more rapid one produces more abundant action, plentiful granulations; but after they have endured but a short time, they fall rapidly into fatty degeneration and suppuration, while still at the circumference of the disease continual formations of such new and transitory tissues continue, leading to wide-spread destruction of the surrounding parts. In the most rapid form of cartilaginous ulceration the change in the structure is still less permanent, for the cell action is so enormously voracious that the hyaline substance is absorbed by them as soon as altered, whence result those smooth-edged ulcers described by Sir B. Brodie as looking "as though they were scooped out with a chisel."

Thus, in opening a joint whose structures have not been so far destroyed by this disease as to forbid its action being fairly traced, we find in some parts the cartilage utterly gone, laying bare the bone; in other parts, the cartilage will only appear thinned and somewhat opaque, while in most it is converted into fibro-cellular tissue. Sometimes a piece of cartilage will be lying among the granulations, and not attached to the bone; such pieces have been usually described as lying *free* in the false tissue. It is not, however, the case in this form of disease, for that surface, which formerly was free, is attached to, is continuous with, the granulations; but that which was deep-surface merely lies on them. The piece of cartilage, with its fragments of articular lamella, has been detached from the bone, and only retains its connections by means of its cellular adhesions with the surrounding false tissues. It is cut off, however, from its nutrient supply, and, no longer capable of inflammation, will now yield to fatty degeneration.

Thus, in a joint far advanced in an inflammatory disease, several morbid processes may be going on at the same time in the same cartilaginous covering. One of these, the essential, is inflammation, which changes the cartilage into an areolar-like structure; the other, accidental, is a degeneration, which unfits it for any further vital act whatever. But that form of malady, in which the irritation and the disease begins on the free surface, and whose characteristic is the inflammation and conversion of the cartilage into a cellulo-fibrous membrane, I have been careful to separate from other forms, where the irritation begins elsewhere, and whose principal action on the cartilage is degenerative, and not converting, but destructive.

Fœtid Perspiration of the Feet. Dr. Jeffries writes to the *Boston Med. and Surg. Journal* of June 14, 1860, that Prof. Hebra, of Vienna, in his lectures on the anatomy and physiology of the skin, says:

"There is no doubt that the sweat glands play an important part in the animal economy. Unfortunately, their physiological, and, still more, their pathological relations are but slightly understood. In general, we know that the secretion of sweat is very copious after hard work or continued bodily exertion, especially in the heat; and further that it is under the influence of the nervous system.

"The sweat is colorless, salt to the taste, has a weak acid reaction, and a peculiar smell. It can scarcely be denied that every person disseminates a peculiar odor. This is proved by dogs following their master's track, and finding him by the help of their greatly-developed organ of smell. *Our* organ of smell does not possess the necessary development to enable us to determine such differences. But there are individuals whose peculiar penetrating odor can be easily recognized by every one. It is a great mistake to attribute such a disagreeable smell to the *sweat alone.* We must rather ascribe it to the secretion of the sebaceous glands. We may be convinced of this by simply examining an individual, the excretions of whose skin have a bad odor. On the palm of the hand, where there are only *sweat* glands, we shall not find any unpleasant smell; it will, on the contrary, be strong on those parts of the body where the sebaceous glands are numerous—as the back and more particularly the arm-pits. It is moreover certain that the smell does not come immediately from the *fresh* secretion, but that it exists after this has decomposed. The fresh secretion has either none, or else a slight odor of rancid fat. But if the sweat remains for some time in contact with the skin, it undergoes a chemical change, and the disagreable smell will be perceived. We shall enter more particularly into this subject when we speak of the 'fœtid foot sweat,' which long ago was considered to be a materia peccans whose elimination from the body was desirable, and with whose healthy excretion no therapeutical interference was allowable.

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"We now come to speak of a subject upon which similar erroneous views still exist. It is the so-called 'fœtid foot-sweat' (bromidrósis). We have already said that the sweat, when secreted, has no bad odor. Hence it comes that persons troubled with this 'fœtid foot sweat' have no disagreeable odor on the palms of their hands, no matter if the perspiration trickles from them. And when the feet are carefully and properly cleansed (together with the toes and nails,) they lose the highly-penetrating smell when they again begin to perspire. This so-called bromidrosis localis is found most frequently in young people who neglect proper cleanliness, and who possess no superfluity of covering for the feet, so that this is seldom changed. Hence, by the decomposition of the collected sweat, free fat acids are formed that have a disagreeable odor. These are absorbed by the pores of the leather, and one can easily convince himself, through his sense of smell, that the boots are the seat of the odor. Persons wearing a light covering for the feet and often changing it, will have little trouble from the 'fœtid foot-sweat.' Hence this seldom occurs in the female sex, although the perspiration is more free in women.

"As, from what has been said, it is evident that we have to deal rather with 'stinking boots' than 'fœtid foot-sweat,' the absurd ideas which are in circulation as to the evil effect of suppressing, or too quickly checking, the sweating of the feet must be entirely given up. On other parts of the body, also, where the secretion has an opportunity to remain some time in contact with the surface of the skin, *e. g.* in the arm-pits, on the scrotum, perinæum, etc., a similar decomposition of the sweat takes place, and a very disagreeable odor is created. The treatment of this 'fœtid sweating of the feet,' is therefore reduced to ordering greater attention to the cleanliness of the skin, and a more frequent changing of the covering of the feet."

This accords with our notions and observation precisely. And we think that "when the feet are carefully and properly cleansed, together with the toes and nails," the affection called 'in-growing toe-nails,' will be met with less frequently, or will be rendered less troublesome.

On Chronic Enlargement of the Lymphatic Glands as a Symptom of Secondary Syphilis. By PROFESSOR SIGMUND, Vienna. (Wien. Medizin. Wochenschrift, 1859, Nos. 22, 23, 25.) Swelling of the glands placed nearest to the primary ulcers may be observed even within the first week after the infection, and by six weeks even the most distant glands may have become affected, although they may not be sufficiently indurated to be plainly felt until after the eighth week. In only very few instances is there any considerable pain, and in the majority of cases the occurrence passes unperceived by the patient or practitioner. The size the glands may reach varies in different persons, and bears no relation to the condition of their health, the inguinal and cervical regions being those in which the largest are met with. The hardness of the gland, slight at first, goes on increasing, until it becomes almost cartilaginoid. The intervening lymphatic vessels do not become much swollen, except in the inguinal region, and even there the cord-like enlargements afterwards diminish, or nearly disappear. When the course of the syphilis is undisturbed by treatment, the swelling and hardness of the glands progressively increase, but eventually the swelling abates, so that the gland even undergoes at last contraction, but retains all the morbid induration, which indeed may persist for the rest of life. The glands continue moveable, as does the skin covering them. It is very rare for suppuration to take place, and when it does occur, the pus is not inoculable.

The author passes in review the various affections of the glandular system which may be mistaken for this one, and admits that in scrofula and tuberculosis, a condition much resembling the syphilitic glands may arise, so that it may be impossible to pronounce an opinion at once from mere objective examination; while the fact of scrofulous or tuberculous subjects becoming syphilitic may also give rise to the true nature of the glandular affection being overlooked. The peculiarity of the syphilitic affection is that it commences nearest the primary sore, and spreads hence gradually and constantly to the more distant glands, pursuing its course without exciting inflammatory action, but inducing an induration which may become permanent. This mode of its production, joined to the general prevalence of the affection, is usually quite sufficient to establish the diagnosis.

Enlargement of the glands precedes the secondary affections of the skin and mucous membrane, persists during the appearance of these and all subsequent symptoms, and still remains when all other subjective and objective symptoms of syphilis have ceased to appear. It is, too, the earliest sign of hereditary syphilis. The chronic enlargement of the glands is observable at all periods of life; a new-born child accidentally poisoned during its passage into the world will exhibit it, as well as the aged subject of syphilis. Neither sex, mode of life, nor race exerts any influence on the manifestation. In subjects who have become affected without having had primary symptoms, as nurses or sucklings, the glandular affection is still gradually developed, and precedes other symptoms of secondary syphilis. So, too, the new-born infant who has contracted the syphilis in utero exhibits the same enlargement, although this is not so easily detected as at a later age. Autopsies, however, completely prove the exactitude of the above statement. The bodily constitution of individuals exerts no marked effect on the fact of the production of the enlargement, although it may influence its amount.

With respect to the treatment of syphilis, this may be purely local, as long as the development of the general affection of the glandular system has not commenced; while, after this period, the author prefers the employment of mercural ointment to all other means. Although the indurated glands rarely return to their normal state, this may happen in strong and otherwise healthy subjects; while in all, their diseased condition diminishes in proportion to the success of the treatment.—*British and Foreign Medico-Chirurgical Review.*

Turning.—M. Van Eden advises that in performing the operation of turning the child in the womb, the woman should be placed on her hands and knees, or, as he calls it *en vache*, and for two reasons: the movement of the hand is not impeded by the arch of the pubes, and the feet of the child are more readily grasped.—*Boston Medical and Surgical Journal*, from *Medical Times and Gazette.*

Enormous Hypertrophy of the Spleen.—M. Sappey lately showed to the Biological Society of Paris a spleen which had reached the following diminsions: length, 13 inches; breadth, 9 inches; thickness, 5 inches. The total weight was 14lb. 4oz. By taking the average of ten normal spleens, the author has found that the ordinary weight is 6½ ounces. M. Sappey thinks that the spleen here spoken of is the largest on record, and adds that those mentioned by authors as having reached 15, 18, 20, and even 43 pounds in weight, were not simply hypertrophied, but are cancerous or cartilaginous, etc.—*Ibid*, from *London Lancit.*

Numerous Tumuli in Cuba first Reported by Mr. Squier.—Mr. Squier, who has recently returned from Cuba, read a notice of tumuli observed by him near the railroad from Havana to Cardenas, sometimes more than one hundred being in sight at once amounting in all to thousands. They are of moderate size, and apparently sepulchral. He has taken steps to procure particular information regarding them, as they have never been noticed by any writer.—*Bulletin Am. Ethnol. Socioty, May* 8, 1860.

Editorial Department.

In another department of The Journal our readers will find a sketch of the proceedings of the American Medical Association at its thirteenth annual meeting held at New Haven. A very large number of delegates were in attendance, and these seem to have brought away lively and pleasant recollections.

The forthcoming volume of "Transactions" will, it is thought, be a small one, the consequence, as may be presumed, of the division of the Association into sections, whereby a closer and therefore something of a critical view of the papers presented was obtained. This, as a result of such *sectional* action, in the beginning, at least, was anticipated; and if the Transactions diminish in size whilst they increase in merit, where is the harm? The idea, the notion, the practice heretofore followed, of transmitting to the 'Committee of Publication,' without examination, any and every paper presented by a member or by a committee, was the absurdest thing in the world—just a ittle more absurd than the Association's proposing to absolve itself from all responsibility for the contents of such paper!

It will be observed that the Association indulged in the customary recreation (we know not what else to call it) of a report and 'resolves' on Medical Education. A meeting without something of this sort, would be an anomaly—at least it would be altogether novel. And the beauty of it is that every year we have these resolves, which, from the noise made about them, would seem to be ushering in a sort of professional millenium, and yet those who make and pass them are the very first to disregard them. Brave gentlemen, truly, and wise, who may be said, somewhat like Macbeth's witches, to

> —keep the word of promise to our ear,
> And break it to our hope!

We shall have something to say of this matter hereafter. For the present we content ourselves with this:

It will be seen that the Committee on Medical Education in the first place "resolved" that candidates "for enrolment as students of medicine" shall have a knowledge of English (wonderful, this!) and also 'a little Latin and less Greek,' as Ben Johnson said of Shakspeare. No better evidence of the necessity of such knowledge, no better argument in favor of it, could well be adduced than the resolutions themselves. They are certainly remarkable as specimens of English! And, moreover, they have caused us to regret, for the sake of the Association generally, and that of some members of the Committee particularly, that the Committee's "pre-requisite" was not made "indispensable" two-score years ago.

The American Medical Gazette, for June, edited by D. Meredith Reese, A. M., M. D., LL. D. etc., after chronicling the appointment of our neighbor, Prof. Bemiss, to the office of Registrar of Kentucky, goes on to say: "Our confrere of the *Louisville Medical Journal*, while conceding Dr. B.'s eminent fitness for the office, makes his 'strong protest' against 'tolerating' the appointment etc." This is precisely what we did *not* do—but the editor of the Gazette seems to be as incapable of understanding English, as he is of writing it correctly or even of quoting it correctly. We 'protested' (if the Gazette will have it so) against the *non*-appointment of Dr. Sutton, and it may be of service to the Gazette to learn that, in this, Dr. Bemiss preceded us by several weeks, (as we learned after our article was published), viz: Dr. Bemiss was no sooner appointed to the office than he voluntarily relinquished quite half of it to Dr. Sutton, of course with quite half of the salary.

The Gazette, referring to us, continues: "If the editor will only continue as he has begun, to quote Latin, Dutch, and Chinese, and ornament his pages with citations of classic verse, * * * * he will soon be, in his own splendid verbiage, [we have corrected the Gazette's English here] "like Milton's head-devil,

——above the rest,

[of the medical journals, we suppose]

In shape and gesture proudly eminent."

We think so, too. And it will go hard with us, when we get fairly to work, as we hope to soon, if we are not 'above' a great many of 'the rest.' Of course we do not include the Gazette among 'the rest'—not at all! The Gazette is unapproachable—it stands alone!

None but itself can be its *parallel*,

—let alone being 'above' it!

The Gazette evidently admires us a little, (sneakingly, to be sure,) and we shall not be surprised if our example seduces it into trying its hand at Latin in a small way by and by. Let the Gazette be cautious about this, however, and do it gingerly withal; for, whilst bad English is often 'tolerated' in a Doctor of Medicine who is also a Doctor of Laws, bad Latin is positively disgraceful in him when he is also a Master of Arts.

To know that the function of a good eye is about to cease—an eye that never quailed before friend or foe, that never winked at wrong, that never failed to look the love or the scorn that you felt; to shudder, to recoil, to shrink away from the sweet light of day into utter and remote darkness, where each access of light is stopped up, where comes no sound of the multitudinous life around you save the sharp ring of the paver's hammer or the heavy roll of a carriage, perhaps filled with gay and laughing inmates, rejoicing in the sunlight; to walk, to sit, to lie hour after hour, day after day, week after week, in that darkness until it grows thick and palpable and weighs heavily upon your frame, as it gathers in gloom over your spirits and deepens down into very sadness at your heart—ah, reader, you must know and suffer this to learn the welcome that may be in the sound of a friendly footfall or of a cheery voice, in the touch of a fair hand upon your brow, in the pressure of a soft lip upon your cheek, and to learn how much of warmth as well as light there lives in gentle and loving eyes! Then to emerge from all this into the broad and garish day, to look unabashed over the face of the green and beautiful earth "in the leafy month of June," to behold once more the glories of sky and cloud, to see again the sheen and play of waters, to walk abroad with the moonlight shimmering around you, wrapping you in its soft and silvery folds as it wraps alike the happiness and misery of half the world—this it is to have a real sense of existence, to feel something of the divinity that there is in life; and this, too, it is to know what a a brave planet God has given to men for a home—a home which men so sadly mar!

And blessed, say we, be all womankind, all mothers and daughters, whether clad with rags or arrayed in silks—blessed be her who without fear obeys the dictates of a good heart, and is faithful to the instincts of a high, noble, and womanly nature! And God be thanked that we have again *two* good eyes—that we still can see as well as feel, even though we cannot hear, that intensest life which stirs and quivers and throbs in everything around us! Yes, blessed be His name forevermore!

Here are the New York World's emotions on beholding an Irishman:

"We never see an Irishman without a series of intense emotions. Whether he happen to be carrying the hod or making a speech; whether he be breaking the head or embracing the body of his friend; whether he be clad in the national integument of corduroy or the effeminate doe-skin, symbolic, in our clime, of solvency and respectability, he is still the undiluted Simon Pure Patlander, as gushing in his susceptibilities, as warm in his affections, as violent and unreasoning in his antagonisms, as when from the bosom of his mother isle he exhumed the succulent potato, or upon it wielded the truculent shillelah or the peaceful spade. He is an emblem and a type of the race which have given to the world its noblest orators, its sweetest poets, its loveliest women, its most mellifluous dialect, and its only bulls. He is to be cherished therefor.'

Urethro-Vaginal, Vesico-Vaginal, and Recto-Vaginal Fistules. By NATHAN BOZEMAN, M. D., of New Orleans, (late of Montgomery, Ala.)

This is a copy of Reports published originally in the *New Orleans Medical and Surgical Journal.* The Reports will be continued in that Journal from time to time, and also will be distributed in pamphlet form. Dr. Bozeman has acquired a high reputation, at home and abroad, in the treatment of the affections named above, and therefore has a right to be heard. We may say, moreover, from our knowledge of him years ago, that whatever he writes on any subject will be worth the reading.

29al 203